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FARGO® DTC1000Me-DTC1250e-DTC4250e-DTC4500e

Card Printer Service Manual

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Introduction

The service manual serves to inform the technician about the DTC Card Printer & Dual-Sided Printing Module & Lamination Module parts replacement procedures.

Important: These procedures can only be performed by authorized service personnel.

Estimated repair time may vary according to the technician's experience.

Caution: Turn OFF the Printer and unplug the power cord from the Printer.

ESD precautions are necessary when handling electronics assemblies

Danger: Wear proper eye protection to perform the procedures in this section.

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Safety Messages (review carefully)

The purpose of this section is to provide the User with specific replacement procedures for the Card Printer.

Please review standard precautions (to take) while performing these replacement procedures.

Symbol	Critical Instructions for Safety purposes
Danger:	Failure to follow these installation guidelines can result in death or serious injury. Information that raises potential safety issues is indicated by a warning symbol (as shown to the left). To prevent personal injury, refer to the following safety messages before performing an operation preceded by this symbol. To prevent personal injury, always remove the power cord prior to performing repair procedures, unless otherwise specified. To prevent personal injury, make sure only authorized service personnel perform these procedures.
Caution:	This device is electrostatically sensitive. It can be damaged if exposed to static electricity discharges. Information that raises potential electrostatic safety issues is indicated by a warning symbol (as shown to the left). To prevent equipment or media damage, refer to the following safety messages before performing an operation preceded by this symbol. To prevent equipment or media damage, observe all established Electrostatic Discharge (ESD) procedures while handling cables in or near the Circuit Board and Printhead Assemblies To prevent equipment or media damage, always wear an appropriate personal grounding device (e.g., a high quality wrist strap grounded to avoid potential damage). To prevent equipment or media damage, always remove the Ribbon and Cards from the Printer before making any repairs, unless otherwise specified. To prevent equipment or media damage, take jewelry off of fingers and hands, as well as thoroughly clean hands to remove oil and debris before working on the Printer.

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Tools need for DTC Card Printer repair- replacement procedures

T10 Torx screwdriver

E Clip tool

Small flathead screwdriver

Needle Nose Pliers

(**NOTE:** HID Global offers a kit that contains many of the tools needed to repair the printers.

Part Number 085627)

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Cover Removal Procedures

Remove/Replace Printer Covers DTC 1000Me- 1250e Single Side

DTC1250e single side shown

Tools needed: T10 Torx screwdriver

Estimated Repair Time: 15 minutes

Preparation:

Important: This procedure can only be performed by authorized service personnel.

	DTC1250e	DTC1000Me
Top Cover/PCB Assy	D930034-02	D930034-02
Front Door	D930265-05	D930265-04
Left Cover	D930263-03	D930263-02
Right Cover	D930264-03	D930264-02
Output Bin	D930269-01	D930269-01

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Open the front door. Locate and remove the 2 screws. (F000178)
3	Lift up the top cover and disconnect the display cable (D930607) from the mainboard. Remove the top cover by flexing the center to disengage the insert tabs.

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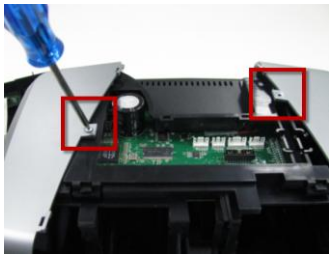
Step	Procedure
4	Remove the 2 screws (F000178) that hold the side covers to the frame. 
5	Remove both side covers. The input and output hoppers are attached to the side covers.
6	Remove the 2 screws on the bottom right and left side to remove the inner back cover. Left side Right side
7	Lift UP the bottom of this cover to release the upper tabs that hold the cover to the frame.
8	Procedure is complete.

DTC Flipper SHORT Dual-Sided Printing Module Removal

Complete Short Flipper Assembly

D930010-04 DTC1250e Dual side

D930010-06 DTC4250e & 4500e Short Flipper

DTC4250e

DTC1250e Dual

If the Dual-Sided Printing Module needs to be removed for any Printer Replacement procedures or to remove the covers follow this procedure.

Tools needed: T10 Torx screwdriver

Estimated Repair Time: 15 minutes

Preparation:

Important: This procedure can only be performed by authorized service personnel.

	DTC1250e	DTC4250e	DTC4500e
Top Cover only	D930192-03	D930192-01	D930192-01
Flipper Front Door only	D930194-01	D930194-01	D930194-01

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.

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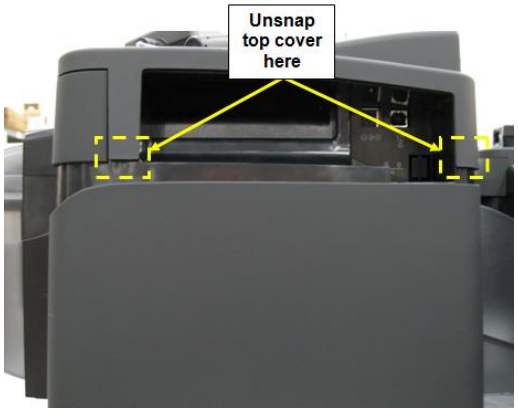
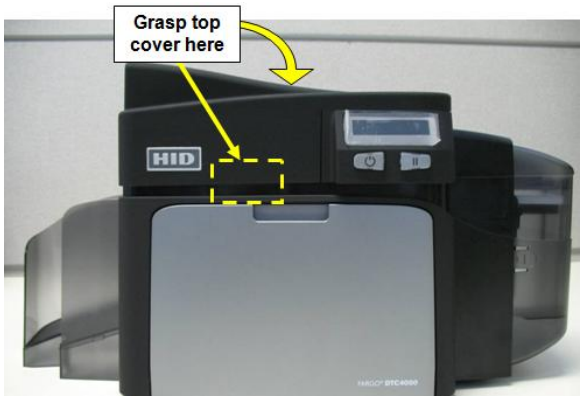
Step	Procedure
2	Remove the Top Cover first in order to access the Flipper Module screw attachment. From the back of the printer locate and remove the 2 screws and washers.
3	Remove the Top Cover. Unsnap the release tabs located on the back of the printer.  Lift the Top Cover from the front edge and tilt up, back and off. 

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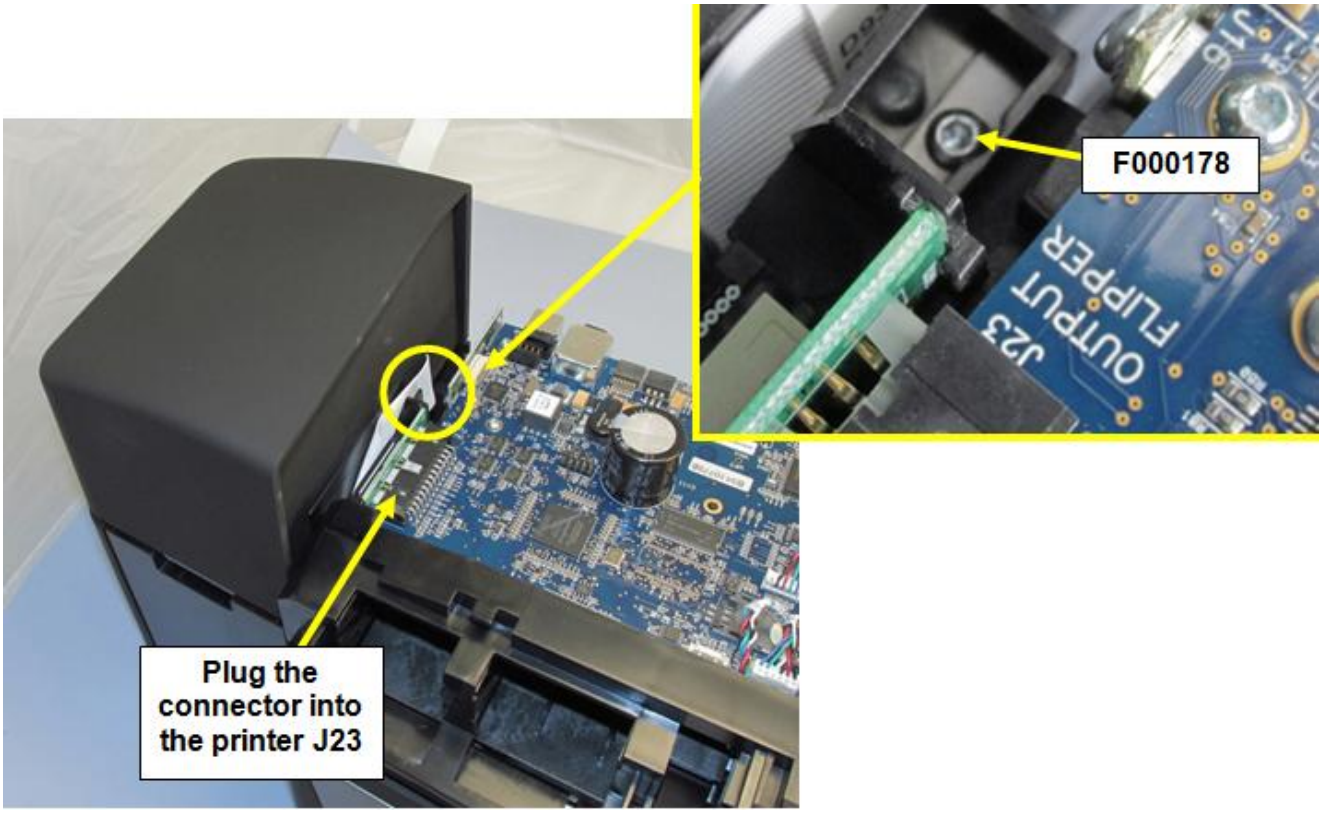
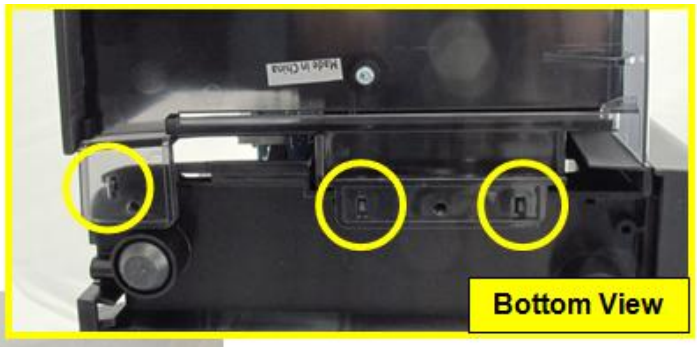
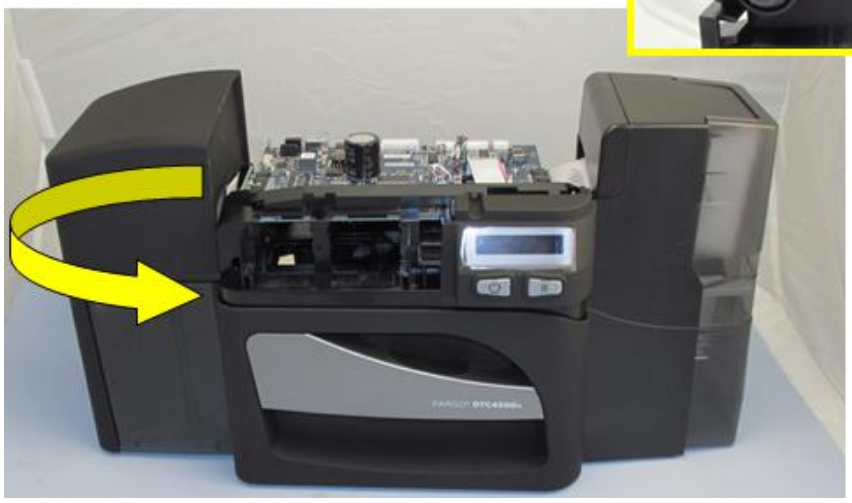
Step	Procedure
4	Remove one (1) screw (F000178) that attaches the Flipper Module to the Printer. Detach the cable from J23 on the mainboard. 

Step	Procedure
5	Tilt the Flipper Module back to release the 3 tabs from the bottom of the printer; **NOTE:** Your printer may or may not have screws holding the Module to the Printer depending on the serial number.  
6	Procedure complete

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DTC1250e DUAL - DTC4250e Single Printer Cover Removal

(**NOTE:** Use this procedure for removing the covers of the DTC1250e DUAL & DTC4250e printer cover AFTER the Dual-Sided Printing Module has been removed.)

DTC1250e DUAL

DTC4250e Single

Tools needed: T10 Torx screwdriver

Estimated Repair Time: 15 minutes

Preparation:

Important: This procedure can only be performed by authorized service personnel.

	DTC1250e DUAL	DTC4250e
Top Cover	D930181-03	D930181-01
Front Door	D930183-03	D930183-04
Output Cover	N/A	D930281-01
Display Cover –blank	D930189-03	D930189-01
Display Cover/PCB	MDP-00059	MDP-00093
Output Bin		D930333
100 Card Input	D930022	D930022

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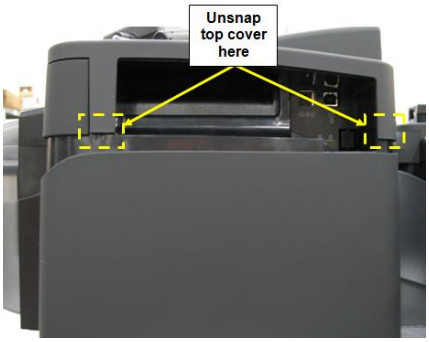
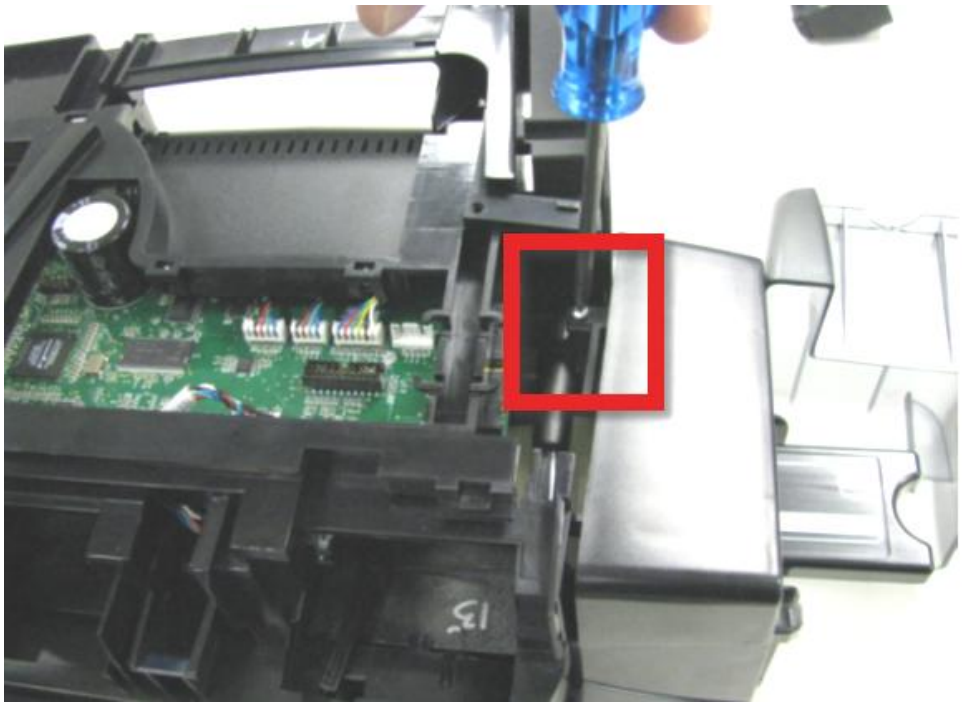
Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	From the back of the printer locate and remove the 2 screws and washers.
3	Remove the Top Cover. Unsnap the release tabs located on the back of the printer.  Lift the Top Cover from the front edge and tilt up and back.

Step	Procedure
4	To Remove the Display: With the Top Cover removed, unsnap the display by pivoting from the top DOWN to release the bottom tabs. Remove the ribbon cable from the mainboard.
5	Remove the screw holding the card input hopper to the frame. 

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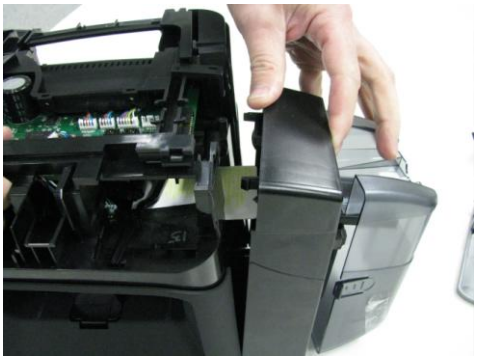
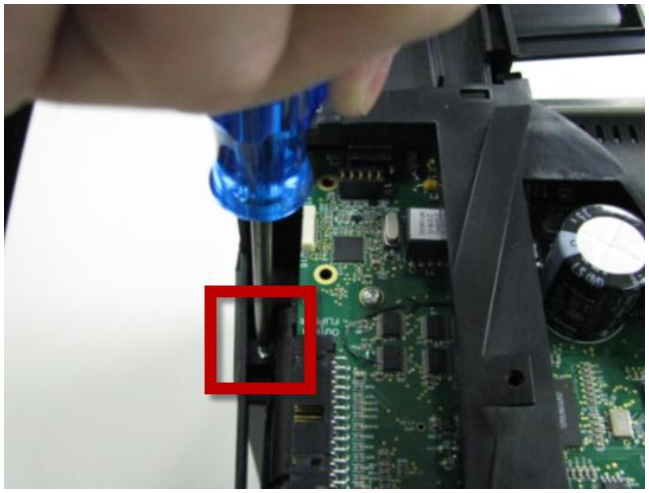
Step	Procedure
6	Remove the Input Hopper by tilting back and away from the frame. There are tabs at the bottom that hold the hopper to the frame. 
7	Remove the screw that holds the Output Cover in place. 
8	Tilt down and remove the Output Cover.

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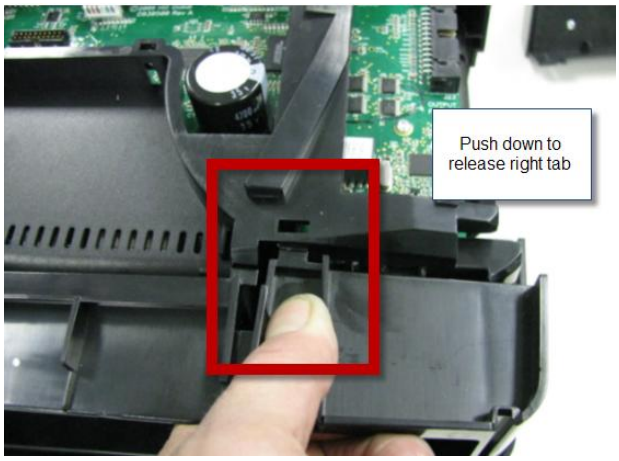
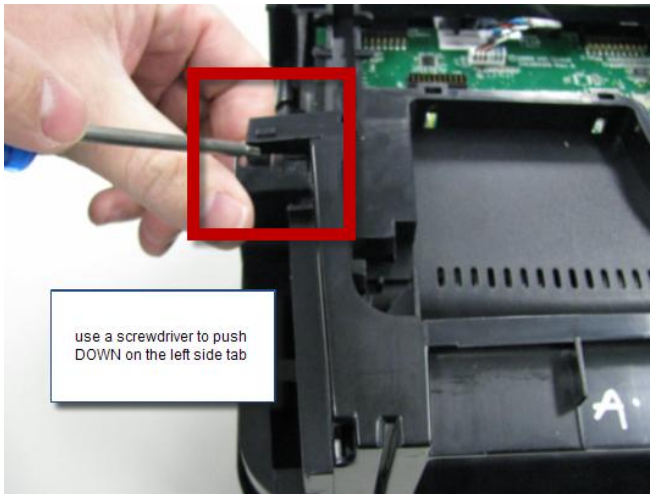
Step	Procedure
9	Remove the outer back cover by releasing the tabs on the right and left side.   Tilt cover down to release the bottom tabs.

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Step	Procedure
10	Remove the 2 screws on the bottom right and left side to remove the inner back cover. Right Side Left Side
12	Lift UP the bottom of this cover to release the upper tabs that hold the cover to the frame.
13	Reverse assembly instructions for replacing the covers.

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DTC4500e Single Side Printer Cover Removal

DTC4500e

Tools needed: T10 Torx screwdriver

Estimated Repair Time: 15 minutes

Preparation:

Important: This procedure can only be performed by authorized service personnel.

Top Cover	D930181-01
Display Cover/PCB/cable	MDP-00093
Output Cover	D930281-01
Output Bin	D930033
Dual Input Hopper	D930039
Front Cartridge/Handle Cover	MDP-00102

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the card output hopper. Squeeze in from the top to unlatch the tabs.

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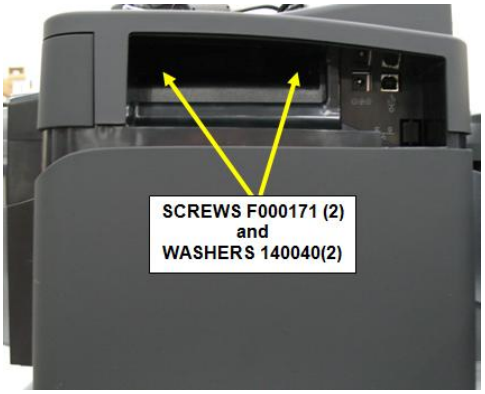
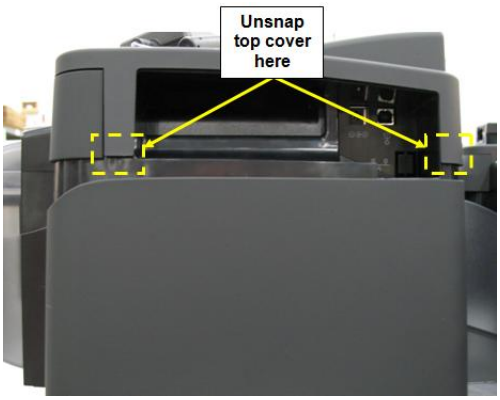
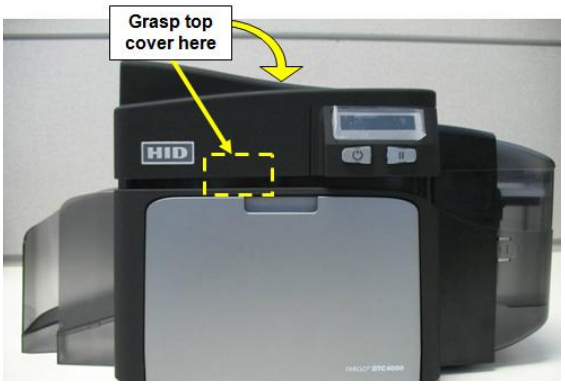
Step	Procedure
3	From the back of the printer locate and remove the 2 screws and washers. 
4	Remove the Top Cover. Unsnap the release tabs located on the back of the printer.  Lift the Top Cover from the front edge and tilt up and back. 

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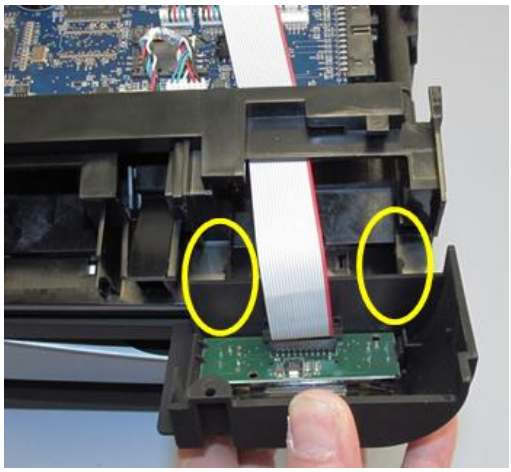
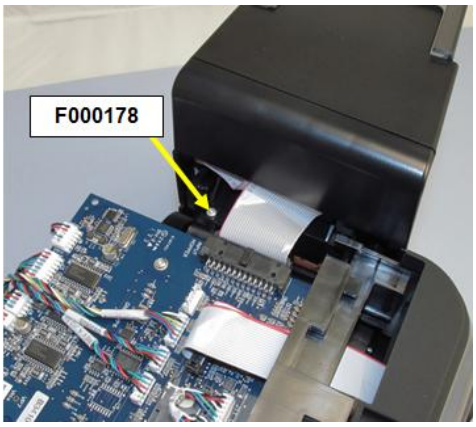
Step	Procedure
5	**NOTE:** In some cases you may need to remove the Display. Unsnap the display by pivoting from the top DOWN to release the bottom tabs. Remove the ribbon cable from the mainboard. 
6	Remove the screw (F000178) holding the card Input Hopper to the frame. 

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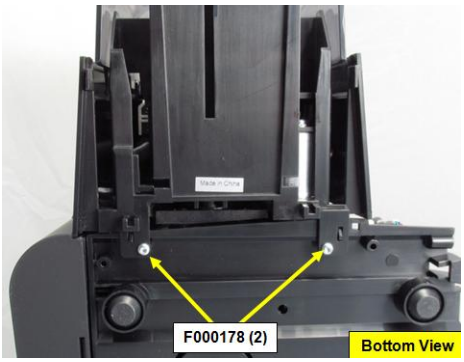
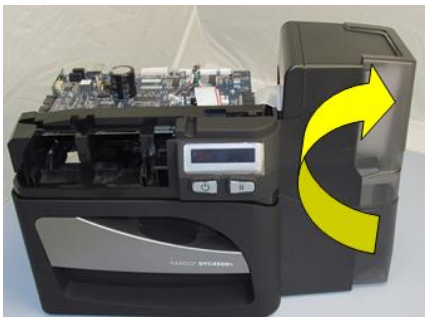
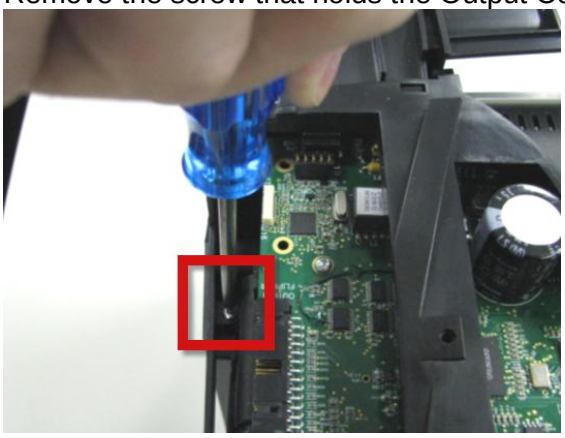
Step	Procedure
7	Remove 2 screws (F000178) from the bottom of the Printer. Release the cable connection. 
8	Remove the Input Hopper by tilting back and away from the frame. There are tabs at the bottom that hold the hopper to the frame. 
9	Remove the screw that holds the Output Cover in place. 

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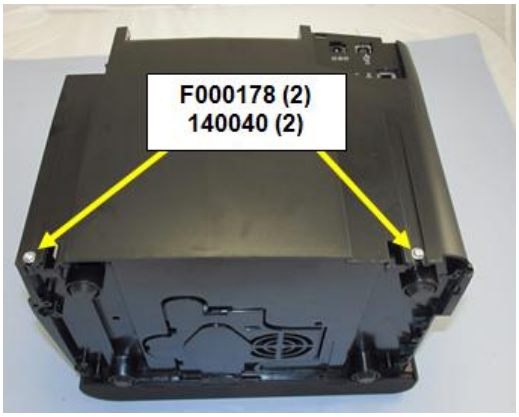
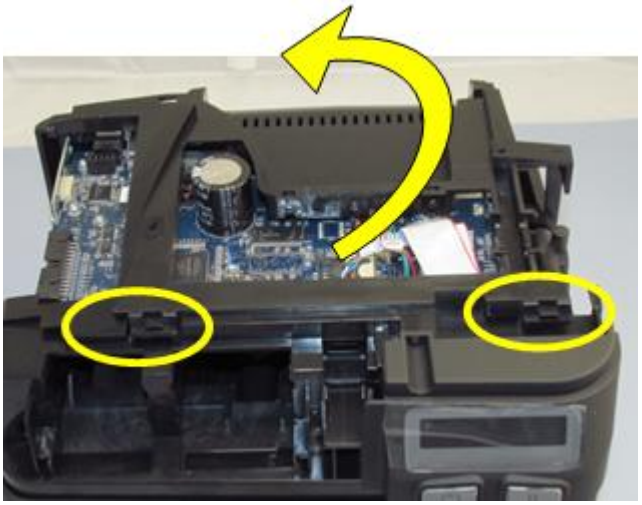
Step	Procedure
10	Tilt down and remove the Output Cover.
11	Remove the Back Cover. Remove the 2 screws and washers. Release for 2 tabs at the front and tilt back to release.  

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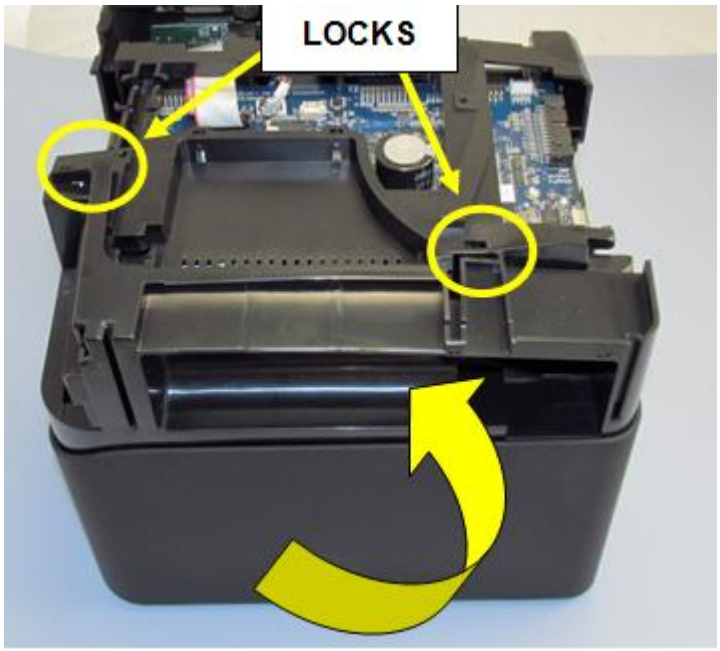
Step	Procedure
12	Lift UP the bottom of this cover to release the upper tab locks that hold the cover to the frame. 
13	Reverse assembly instructions for replacing the covers.

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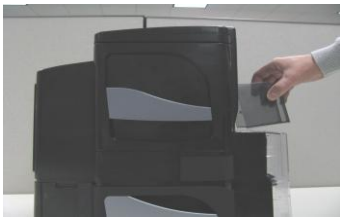
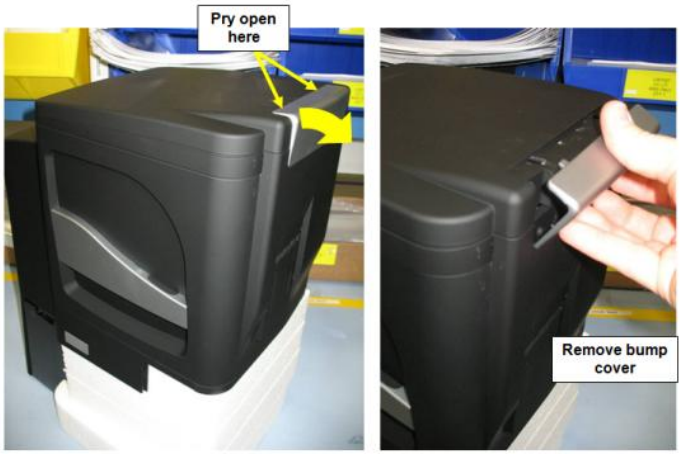
DTC4500e Lamination Module Cover Removal

NOTE: Remove the Lamination Module prior to removing the printer covers if repairing the PRINTER. The Lamination Module does not need to be removed in order to repair the Lamination Module (unless replacing the Lamination Mainboard).

	Tools needed: T10 Torx screwdriver Estimated Repair Time: 15 minutes Preparation: **Important:** This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the card output bin (D930296-01) 
3	Remove the Input Bump Cover (D930292-02) 

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Step	Procedure
4	Lift up the Top Cover (D930294-01) to unsnap it from the module.
5	Open from front door. Unsnap to loosen the 2 side tabs located on either side of the Lam Input Cover (D930290-01) (It is not necessary to remove the Lam Input assembly to remove this front plate.) Tilt the Lam Input Cover outward and slide UP to remove. **NOTE:** Tab Inserts

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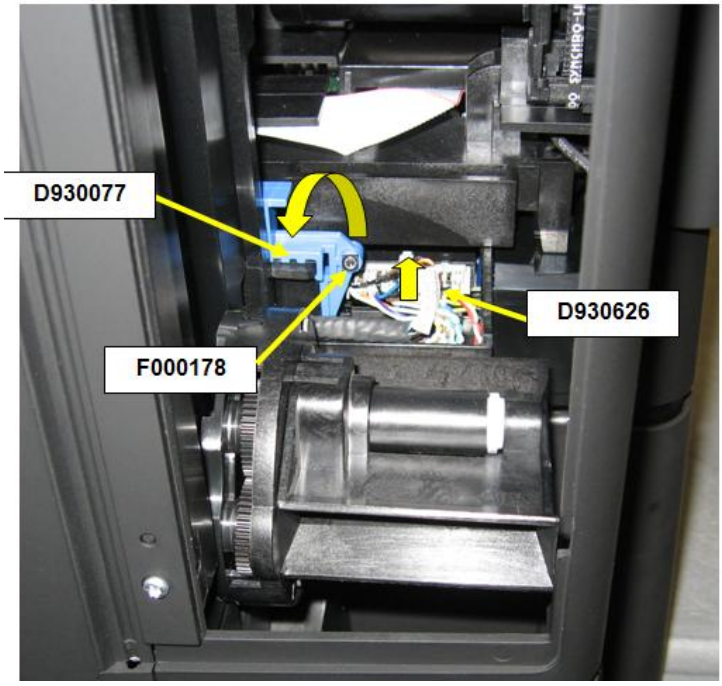
Step	Procedure
6	Open the Flipper Door. Remove the 2 screws (F000178) from the left side. Picture shows door removed, but not necessary for Lamination cover removal.
7	Remove 1 screw (F000178) from the blue retainer clip (D930077). Disconnect the Flipper Cable (D930626) 

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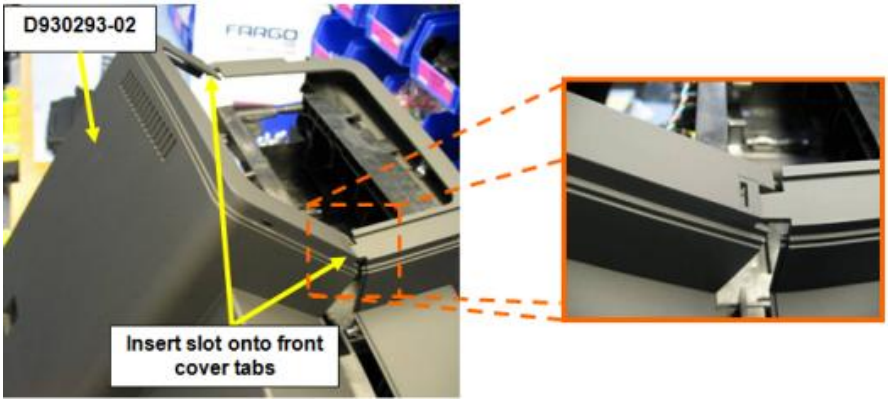
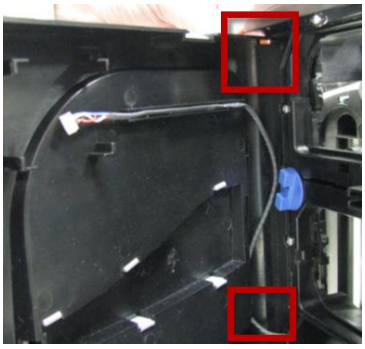
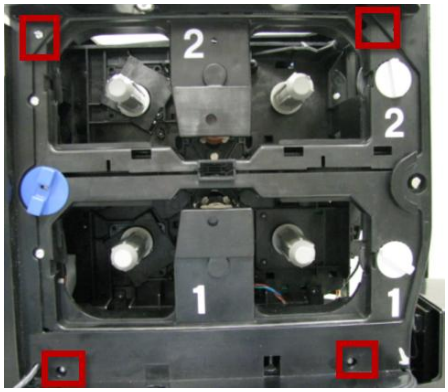
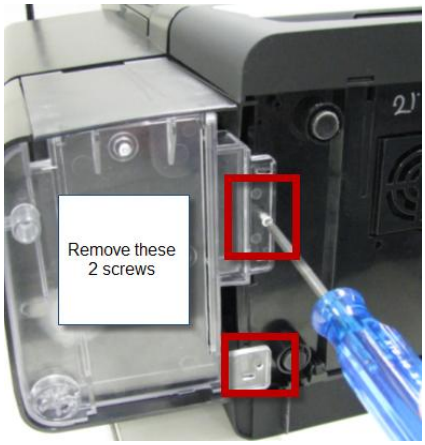
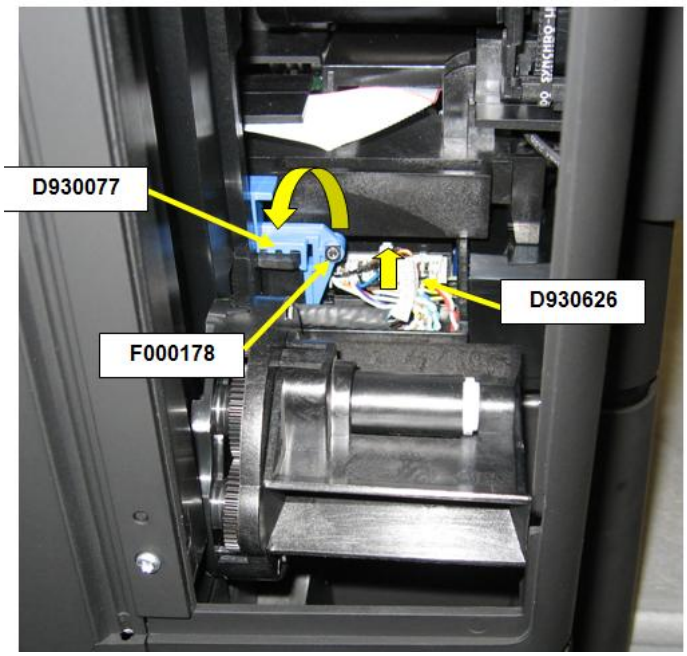
Step	Procedure
8	Unsnap the Lam Back Cover (D930293-02) panel from the bottom and lift up to remove. Make **NOTE:** of the latches holding these together when replacing it. 
9	Remove the Front Lam Door Cover (D930291-01) by flexing the door IN, release the top and bottom pins holding the door to the frame. 
10	Remove the 4 screws that hold the Front Lam Cover (D930289-01) to the frame. 
11	Procedure complete

.

Complete Lamination Module Removal

1	If the Lamination Module needs to be removed from the printer completely then turn the printer over and unscrew the 2 screws that attach the Lamination Module to the printer. 
2	Remove the screw (F000178) from the Retainer Clip (D930077) that holds the Lamination Module to the Printer. Disconnect the Flipper Cable (D930626) 

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Step	Procedure
3	Set the printer upright and move to the edge of the table. Unclip the tabs from below and move the module outward. This will release the PCB connection within the door. **NOTE:** When replacing the module carefully line up the PCB connection; push the module onto the printer base to connect the PCB. Do not force or bend pins.
4	Procedure is complete. Reverse assembly to reinstall the Lamination Module.

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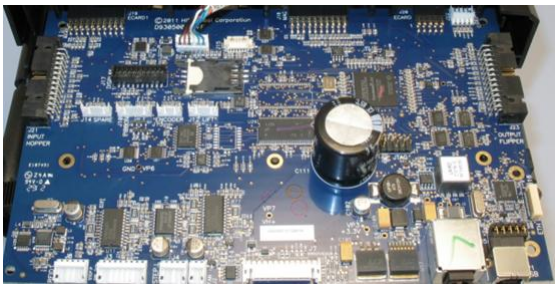
Parts Replacement- Printer

Remove/Replace the Mainboard



NOTE: : NA=Non-APAC

AP=APAC

FD=Flipper Dual

Check the printer label to order the correct board.

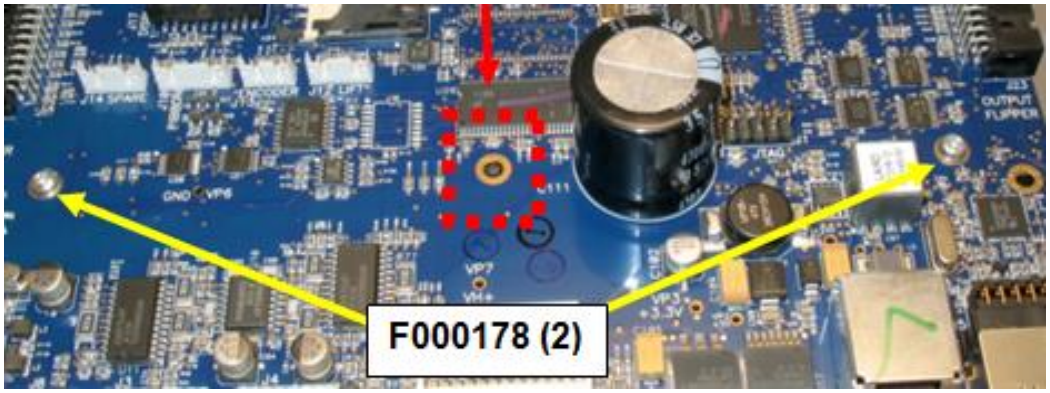
Tools needed: T10 Torx screwdriver

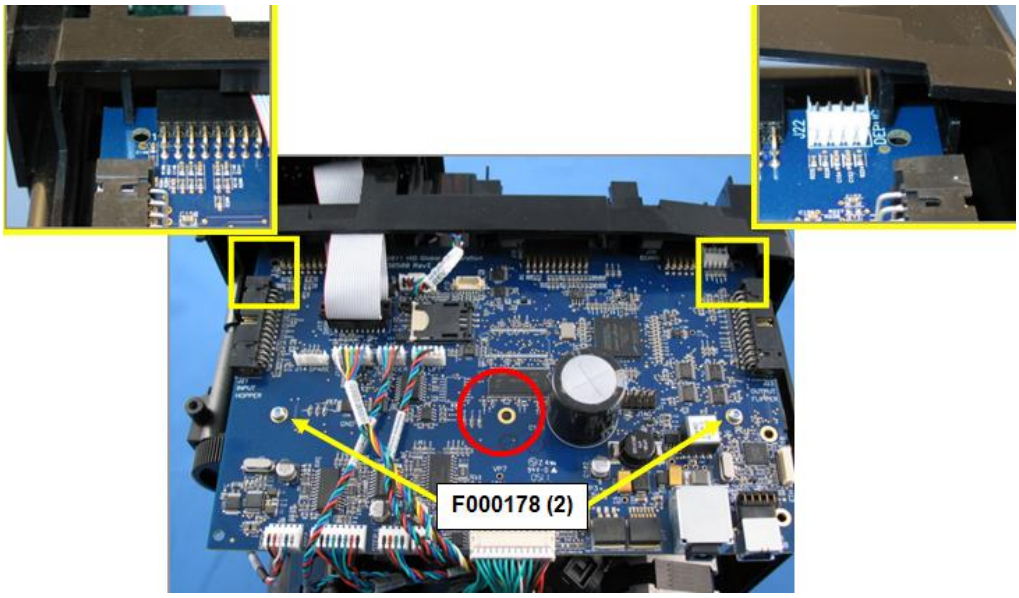
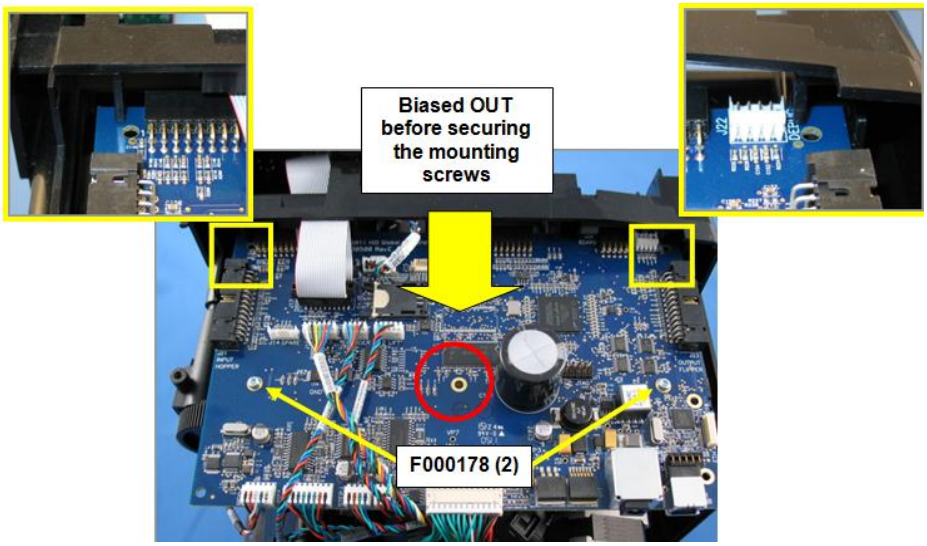
Estimated Repair Time: 20 min

Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

DTC1000Me	PCA-00106
DTC1250e	PCA-00102 NA
DTC1250e	PCA-00103 AP
DTC1250e	PCA-00104 FD NA
DTC1250e	PCA-00105 FD AP
DTC4250e	PCA-00107
DTC4500e	PCA-00109

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the covers to access the mainboard. Remove all the wire connections from the Mainboard.
3	Remove the 2 screws (F000178) shown. The center open hole is for the frame peg. 

Step	Procedure
4	Slide board out from the corner posts 
5	Install new board and reconnect all wires. Wires are labeled for location connection. 
6	Procedure is complete.

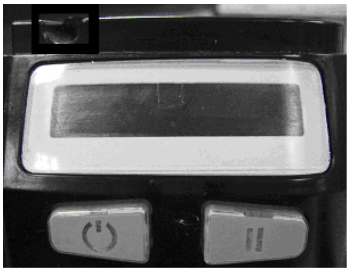
.

Remove/Replace the Display Assembly (MDP-00093 DTC4250e/4500e)

(MDP-00059 DTC1250e)

Contains Cover, PCB, LCD Buttons and Cable

The same procedure is used for either orientation of the LCD Display.



MDP-00093

MDP-00059

Tools needed: T10 Torx screwdriver

Estimated Repair Time: 15 min

Preparation: Remove Top Cover

Important: This procedure can only be performed by authorized service personnel.

LCD PCB (board only) DTC4250e 4500e A930507-01

LCD PBC (board only) DTC 1250e A930507

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the top cover of the printer.
3	Pull forward on the display to un-snap from the bottom of the display. Lift out to remove.
4	Remove the ribbon cable (D930607) (Also from the LCD PCB A930507-01-DTC4250e/4500e).

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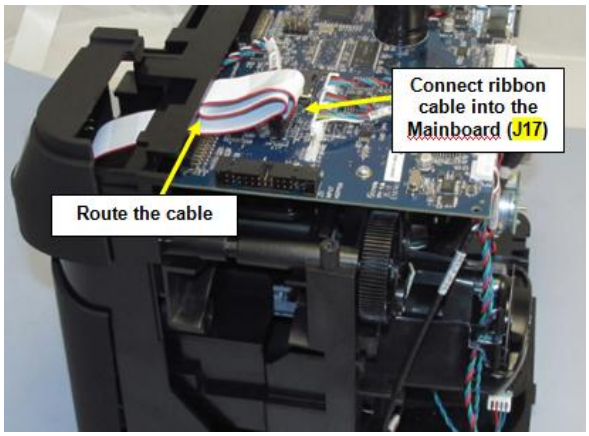
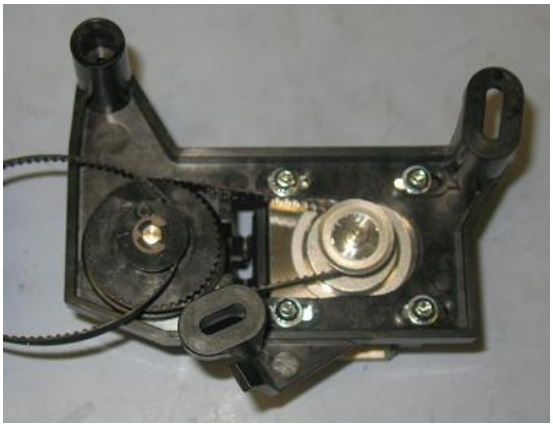
Step	Procedure
5	Install completed assembly. Do not pinch the cable when replacing. Pull cable taught when replacing. 
6	Procedure is complete.

.

Remove/Replace the Stepper Motor D930027, Stepper Belt F000424, Pulley D900430



Tools needed: T10 Torx screwdriver

E CLIP tool

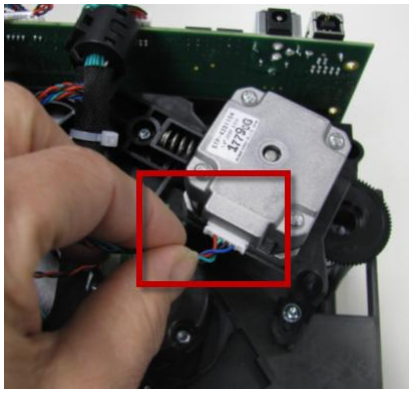
Estimated Repair Time: 30 min

Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

Part Number: Complete Stepper Drive assembly

D930028

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove Covers.
3	Lay printer on its front. Remove the cable harness (D930600) from the Stepper Motor. 

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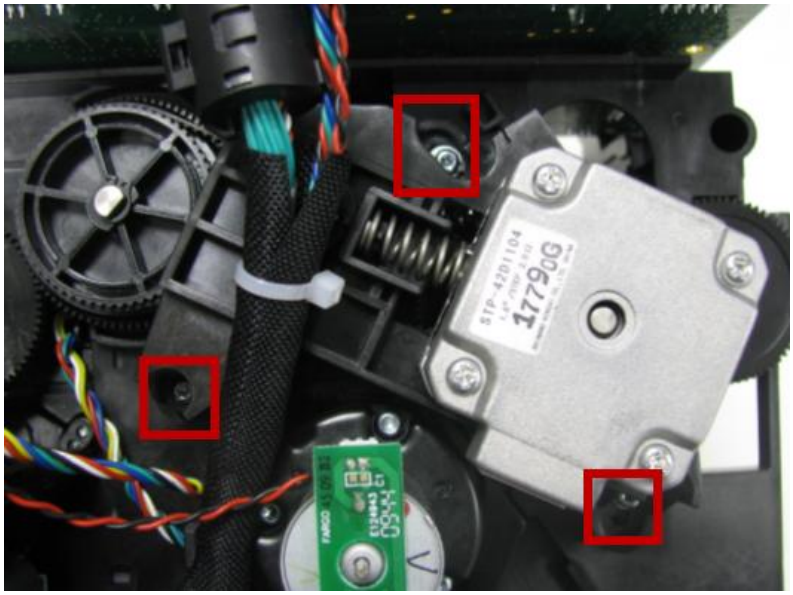
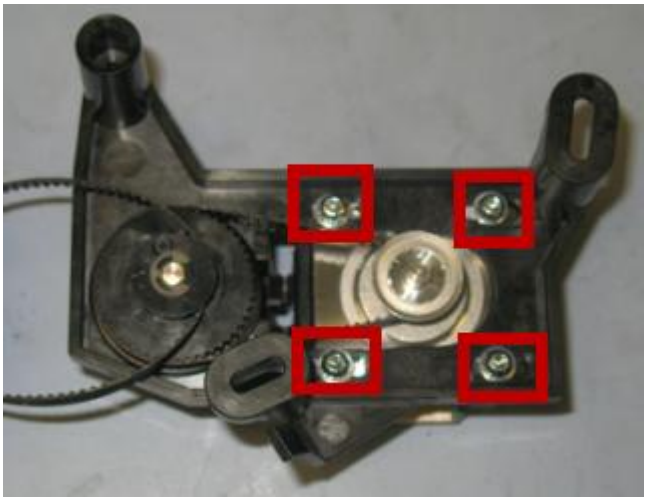
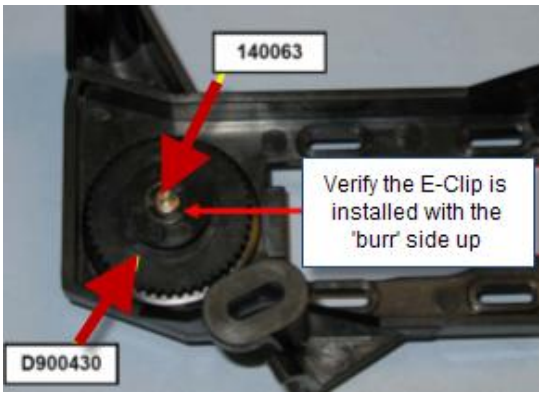
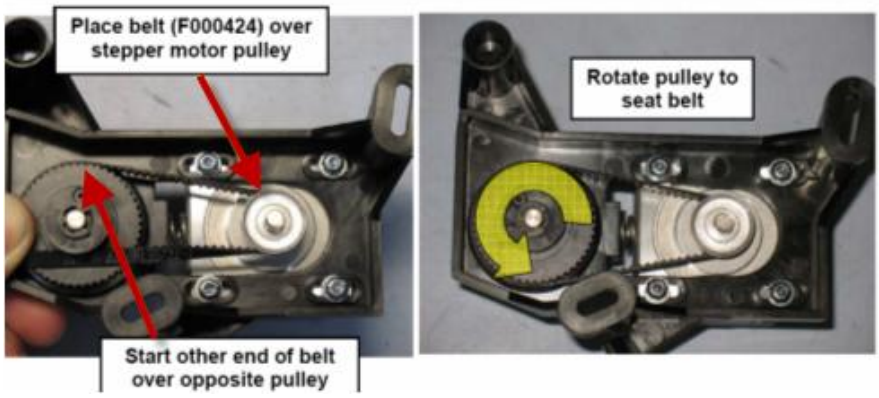
Step	Procedure
4	Remove the 3 screws that hold the Motor/Mount to the printer frame. (Make **NOTE:** of where the 2 screw/washers go and the one machine screw. Remove the printhead cable for more clearance) The motor is attached to a plastic mounting frame. 
5	Remove the 4 screws that hold the stepper motor to the mount frame. One belt (F000424) will come off of the platen roller pulley/gear (D900429).  (Caution: Spring may pop out. Safety glasses required)

Step	Procedure
6	If replacing the Pulley D900430 remove the E CLIP (140063). Replace with new Pulley. Re-install the E-clip. 
7	Replace the new Motor to the mount frame. Make sure Spring (F000332) gets put back into proper place
8	Install the belt (F000424) 

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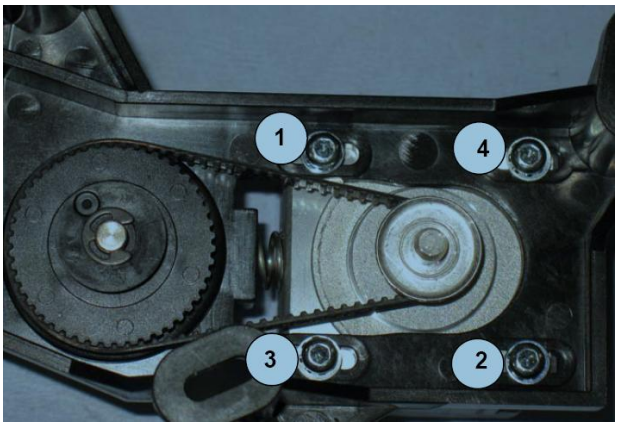
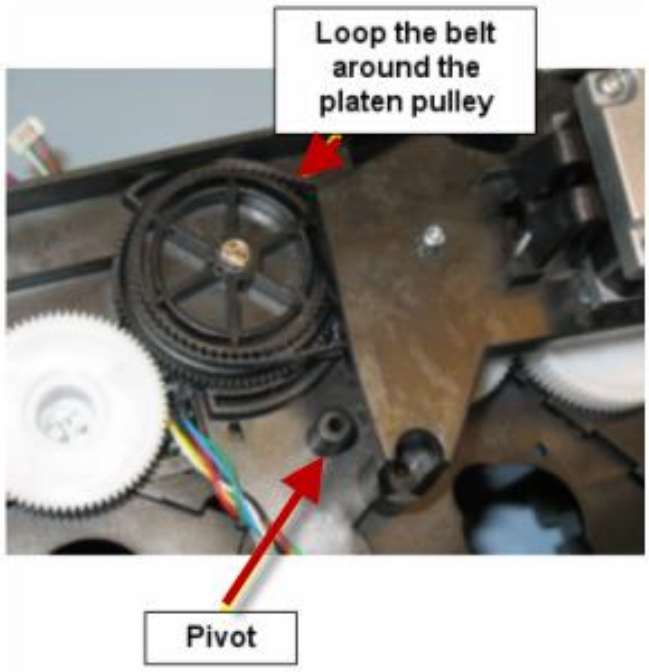
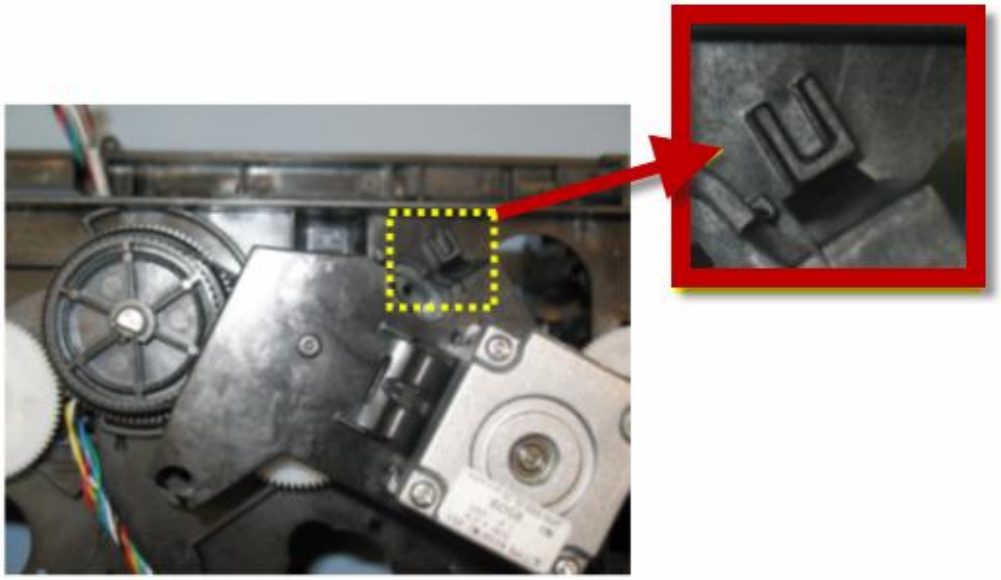
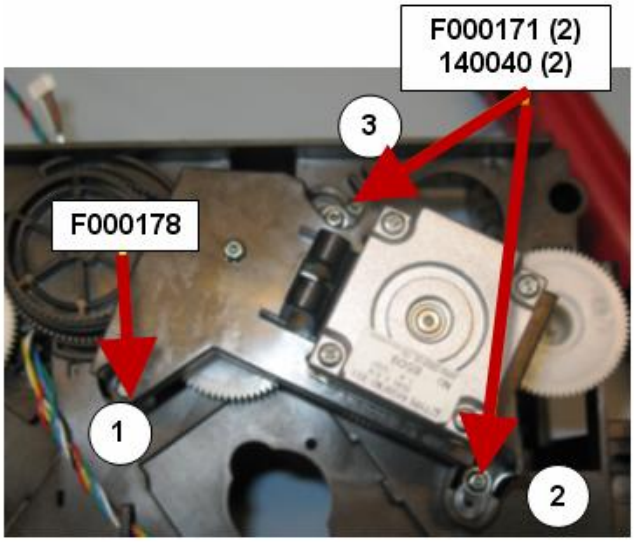
Step	Procedure
9	This Stepper Motor Mount provides a self tensioning feature. Keep the four (4) screws loose while holding the Mount Frame. Allow the spring to self-tension, then tighten the four (4) screws. 
10	Install belt on stepper motor assembly and then loop the belt w/stepper drive assembly around the platen roller shaft gear. Place the Stepper Mount over the pivot peg. 

Step	Procedure
11	Fit the Mount behind the tab on the printers side plate frame. This locks the mount in place. 
12	Secure the stepper drive assembly with 2 screws (F000171) with 2 washers (140040), and one screw (F000178) at the specific locations shown. **NOTE:** Lightly tighten all screws first then tighten the (F000171) screws last. 

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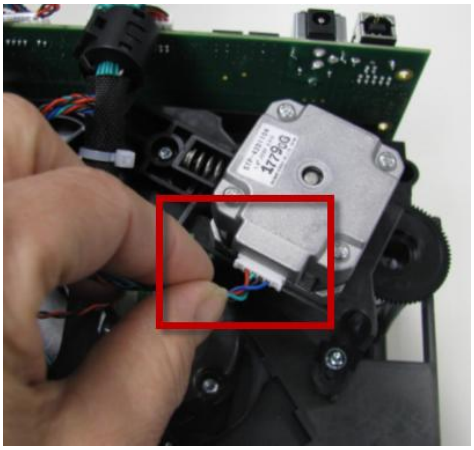
Step	Procedure
13	Plug motor cable back in.  Replace the Printhead cable if it was removed in step 4.
14	Procedure is complete.

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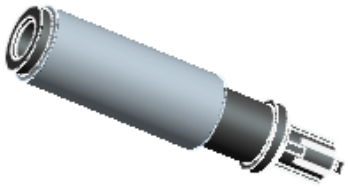
Remove/Replace the Mag Roller (D930122)

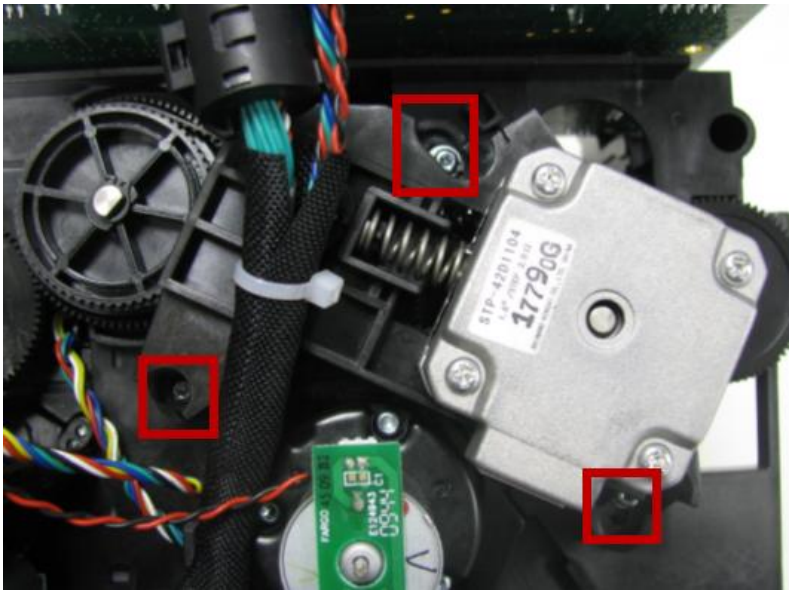


Tools needed: Small flat screwdriver, T10 Torx screwdriver

Estimated Repair Time: 20 min

Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the Stepper Motor Assembly (D930028) Remove the 3 screws that hold the Motor/Mount to the printer frame. (Make **NOTE:** of where the 2 screw/washers go and the one machine screw. Remove the printhead cable for more clearance.) The motor is attached to a plastic mounting frame. 

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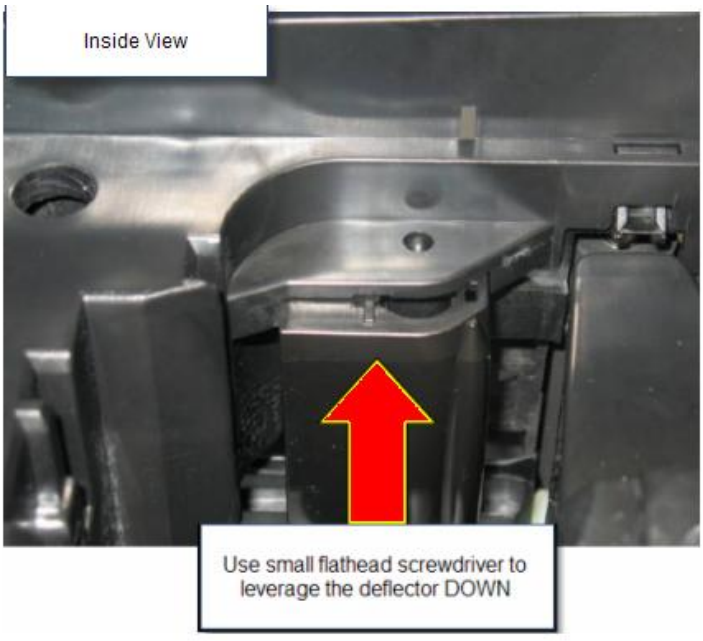
Step	Procedure
3	Remove the Mag Roller Gear (D930361) by pulling out.
4	Remove the Ribbon Deflector Plate (D930129) to access the Mag Roller. Release the tabs that hold the plate in place. 
5	Pull the Mag Roller out from the front side of the printer.

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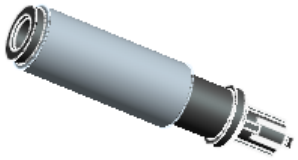
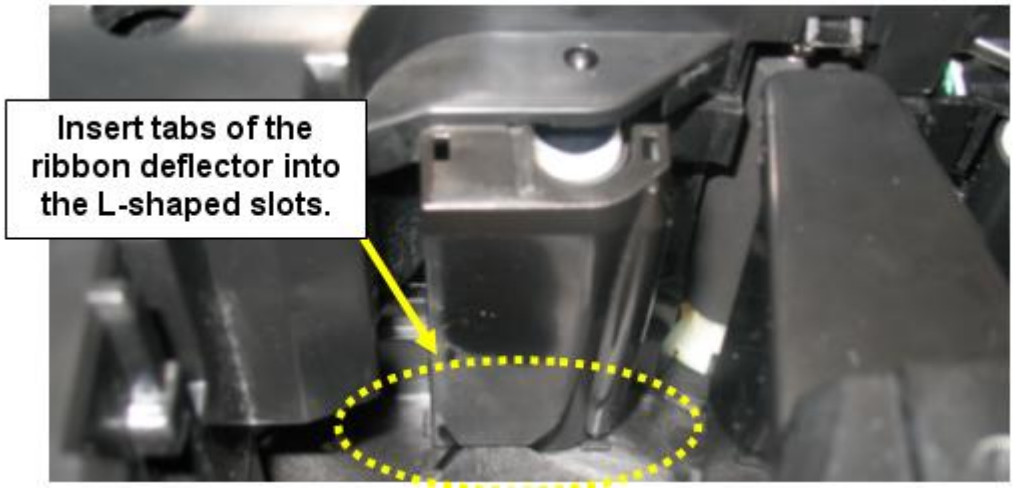
Step	Procedure
6	Replace with the new roller. Install the Mag Roller from the back to hold the roller in place. Make sure roller sits in front tab (hidden) in front sideplate. Make sure tabs line up and snap into place. Wiggle in place.  **NOTE:** Do not hold the roller by the rubber but only from the plastic shaft. The rubber can move out of position on the shaft and cause a print quality issue.
7	Install the Ribbon Deflector Plate. 
8	Re-install Stepper Motor assembly
9	Procedure is complete.

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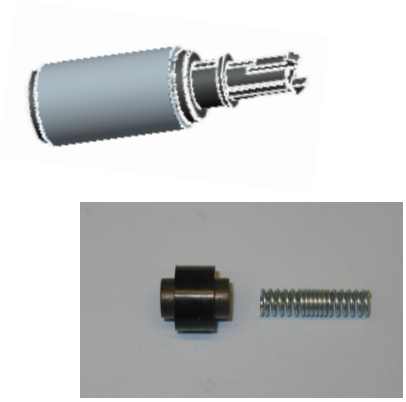
Remove/Replace the Output Roller (D930123) Pinch Roller-spring (D920013-F000338)

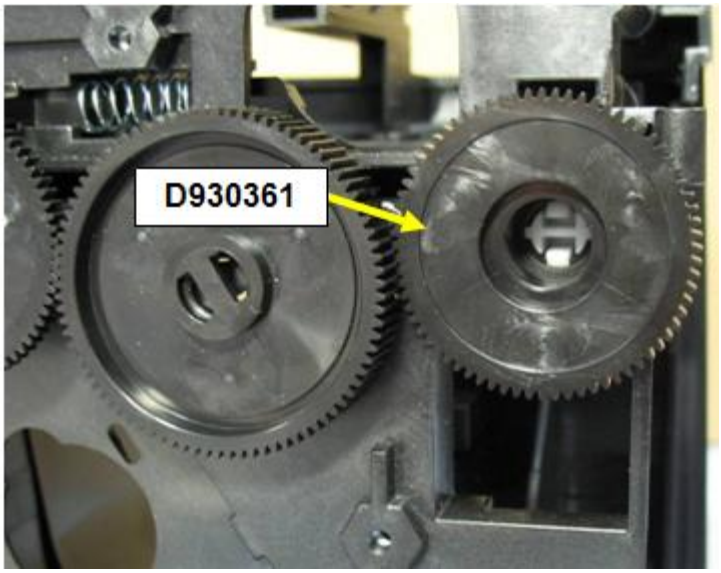


Tools needed: T10 Torx screwdriver

Estimated Repair Time: 20 min

Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the Output Roller Gear (D930361) by pulling straight out. No need to remove the Stepper Motor Assembly. 

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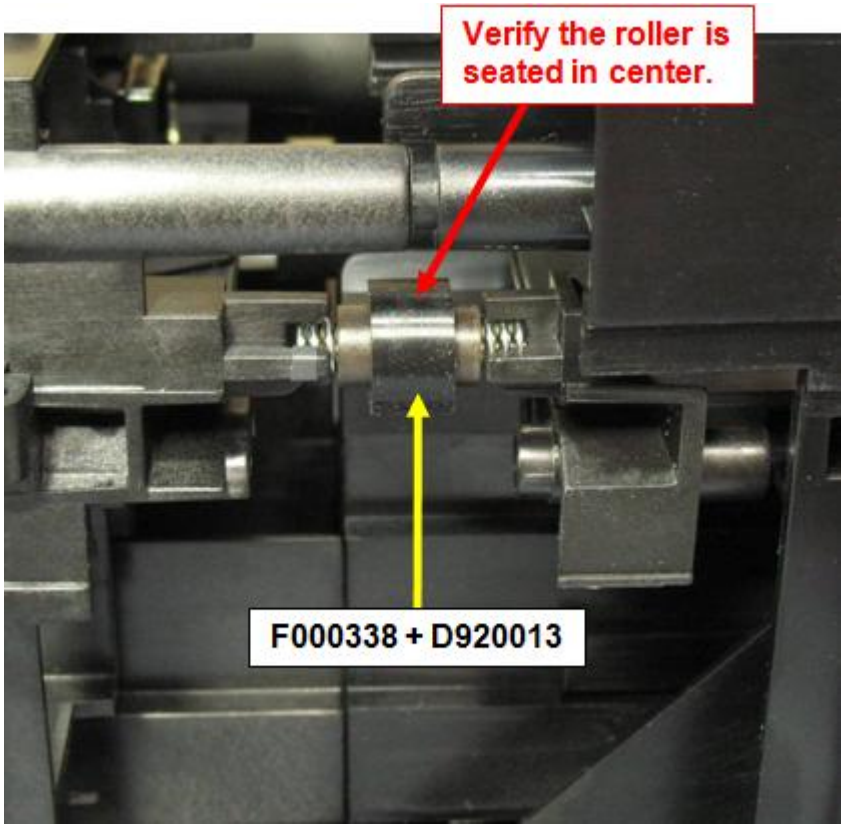
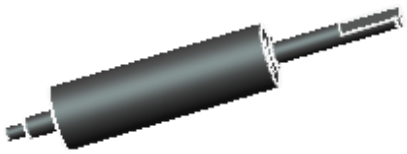
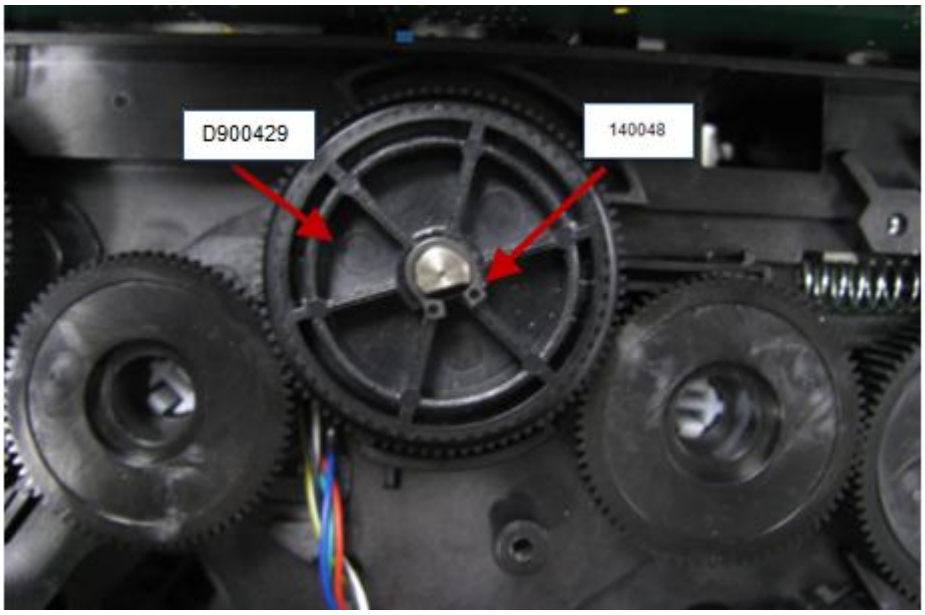
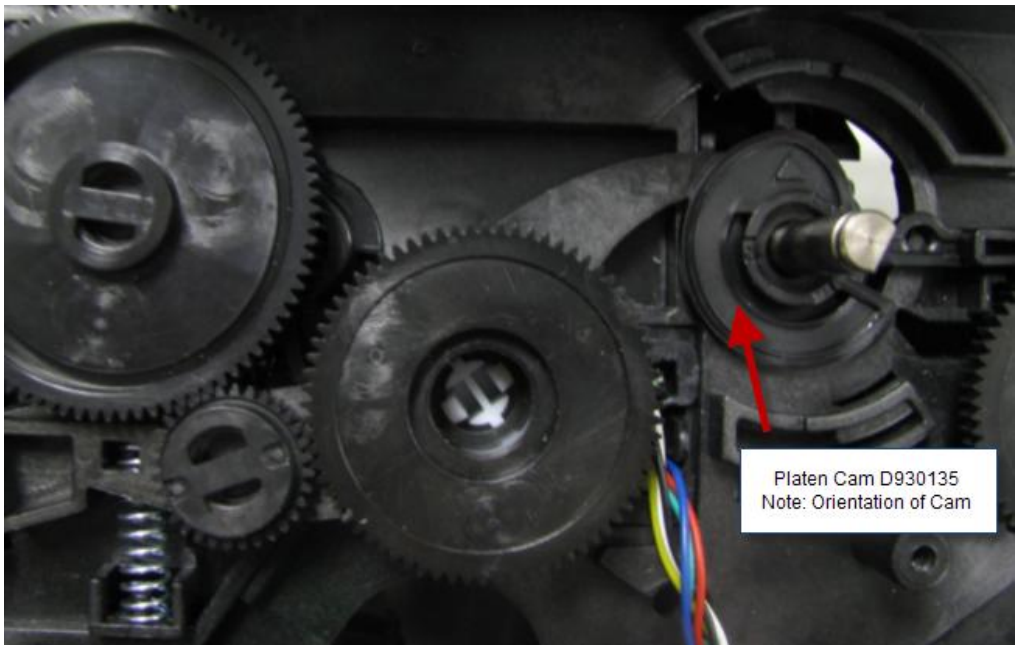
Step	Procedure
3	Flip printer on front remove Output Roller (D930123) Pull straight up and out
4	Replace with new roller and replace the gear onto the roller. Procedure completed.
5	**Pinch Roller and Spring** Remove the output roller first (as stated above) and then remove the Pinch Roller Use a small flathead screwdriver to release the spring (F000338) and the Pinch Roller (D920013). Replace with new roller. 
6	Reverse assembly to reinstall parts.
7	Procedure is complete.

.

Remove/Replace the Platen Roller (D930120) & Pulley/Gear (D900429)

	**Tools needed:** T10 Torx screwdriver Estimated Repair Time: 45 min **Preparation:** Remove the Covers **Important:** This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the Stepper Motor Assembly (E000062)
3	Remove the E Clip (140048) and the pulley/gear(D900429)  Remove washers from shaft. (Replace the gear if necessary)

Step	Procedure
4	Turn the twist lock Bushing-Twist Lock (D930178) counter clockwise to unlock and lift up. It is not necessary to remove the surrounding gears.
5	Remove the Platen Cam (D930135). Rotate cam clockwise to remove. Pull off of the Platen Roller Shaft. 

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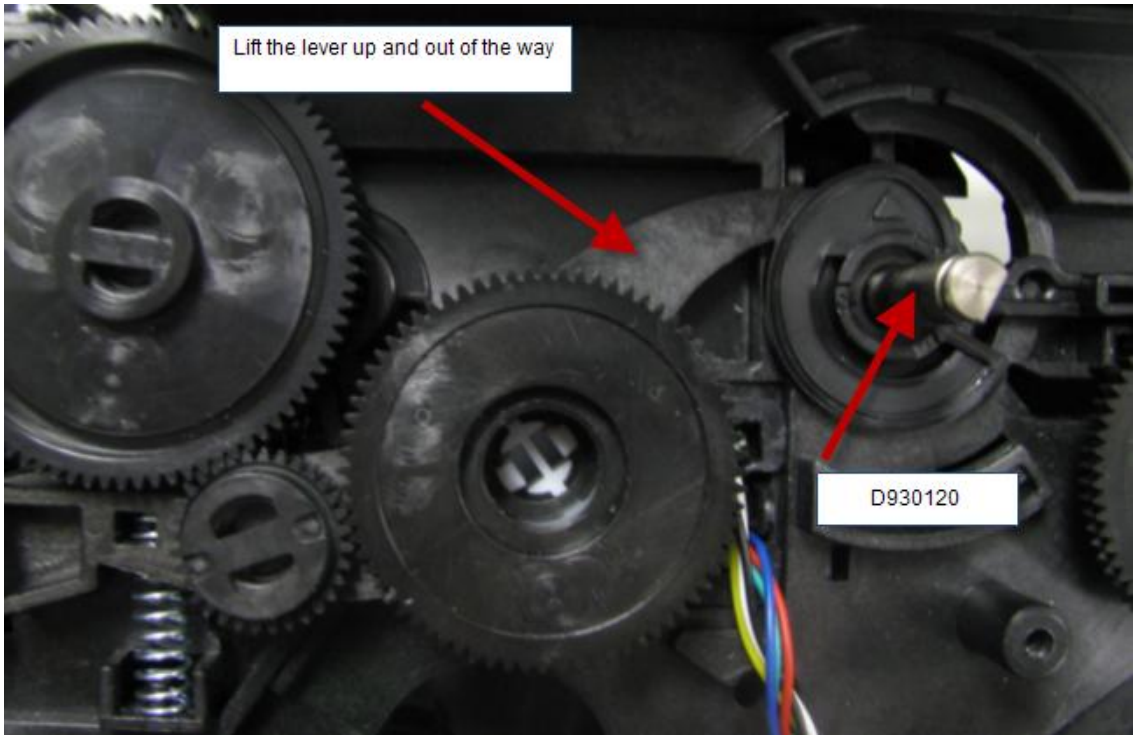
Step	Procedure
6	Remove the print head assembly if better access is needed. See Printhead removal procedure Replacing the DTC Printhead.
7	Move the lever up to clear the Platen Roller (D930120) 
8	Replace with new roller.
9	Reverse assembly to reinstall parts.
10	Procedure is complete.

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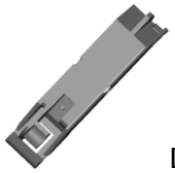
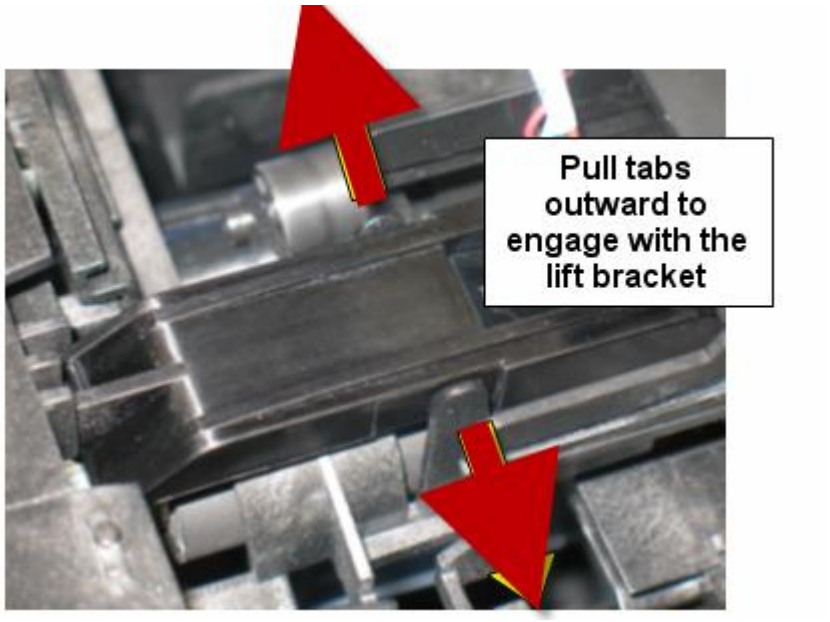
Remove/Replace the Lift Pinch Roller Assembly (D930137) Pinch Lift Bracket (D930136)

D930137  D930136	**Tools needed:** T10 Torx screwdriver Estimated Repair Time: 20 Min **Preparation:** . Remove the Covers **Important:** This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the mainboard (D930500)
3	Pull the tabs apart on the Bracket (D930136) to release. Lift up and out. 

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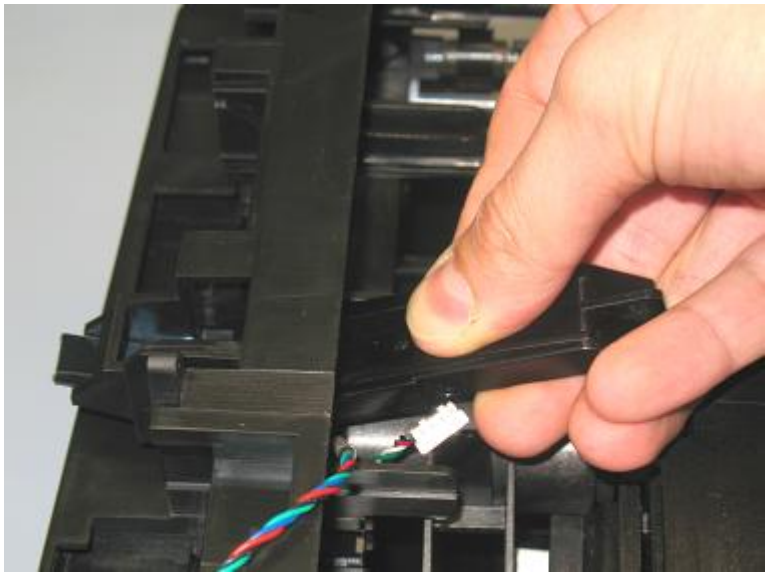
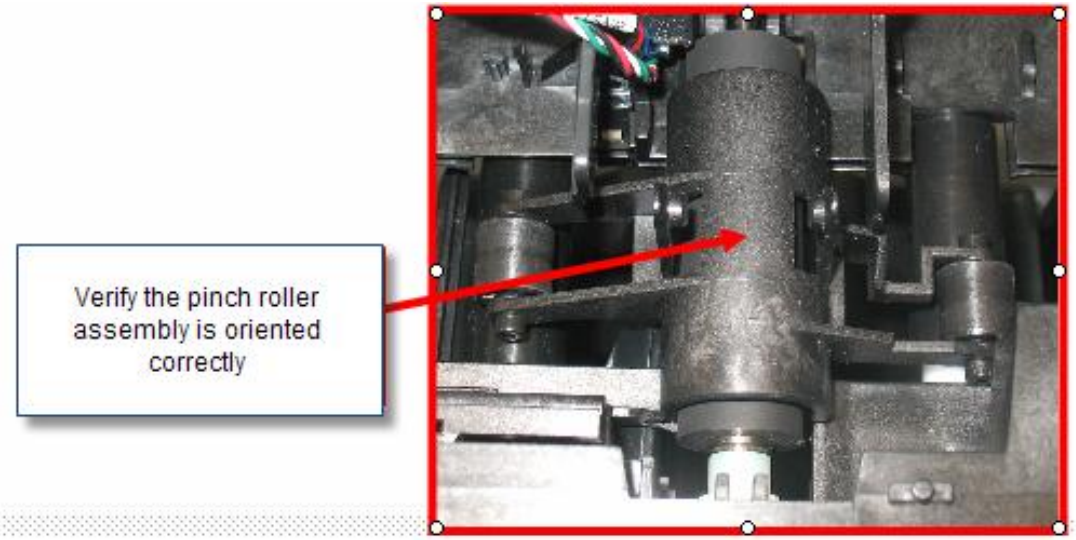
Step	Procedure
4	Rotate the Lift Bracket (D930136) with the spring (D930266) upwards to disengage the hinge. 
5	Lift out the Pinch Roller Bracket (D930137). **NOTE:** Verify orientation when re installing. 
6	Replace with new Platen Roller. Lock platen with cam first into the front sideplate.

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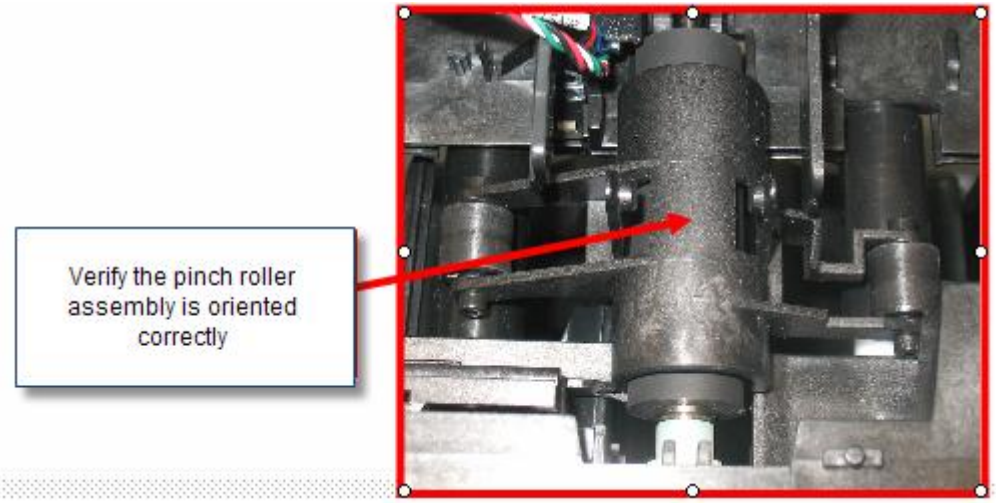
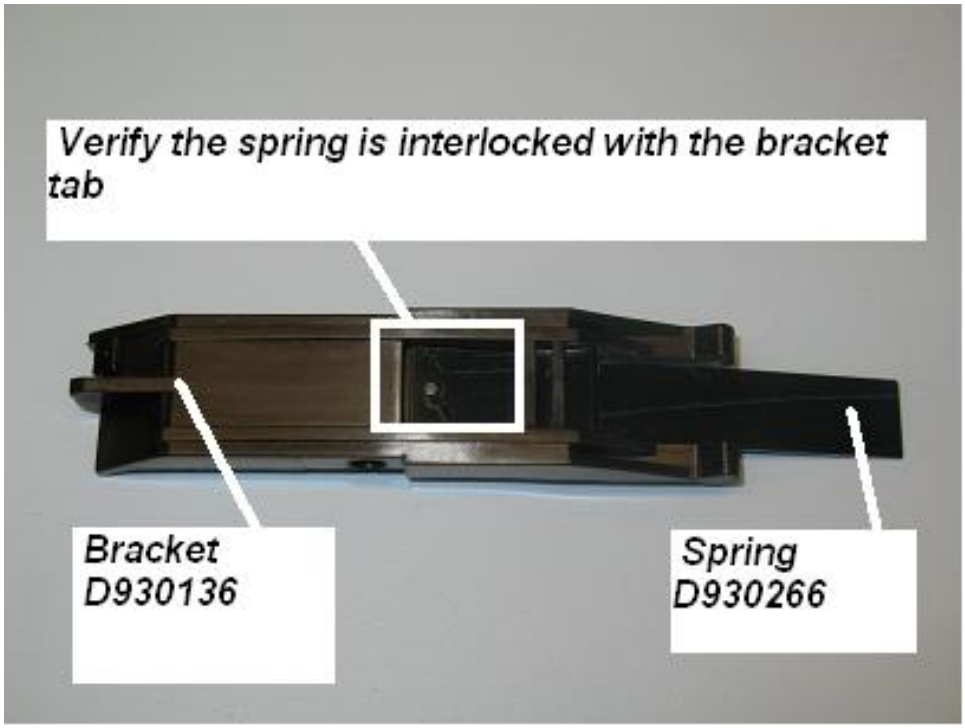
Step	Procedure
7	To reinstall the Pinch Roller Assembly: a. Verify orientation of the Pinch Roller Assembly  b. Connect the spring to the bracket.  Continued next page c. Insert the Bracket tabs into the holes provided in the sideplate frame. (continued on next page)

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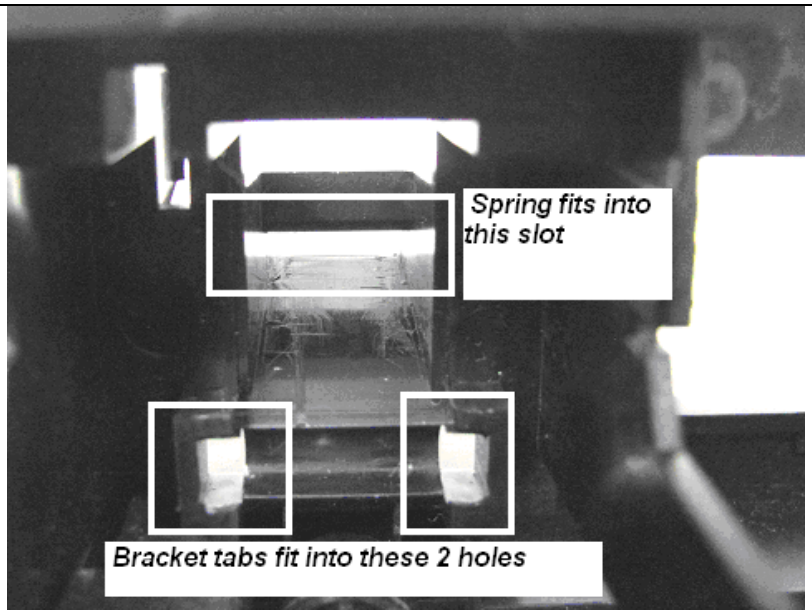
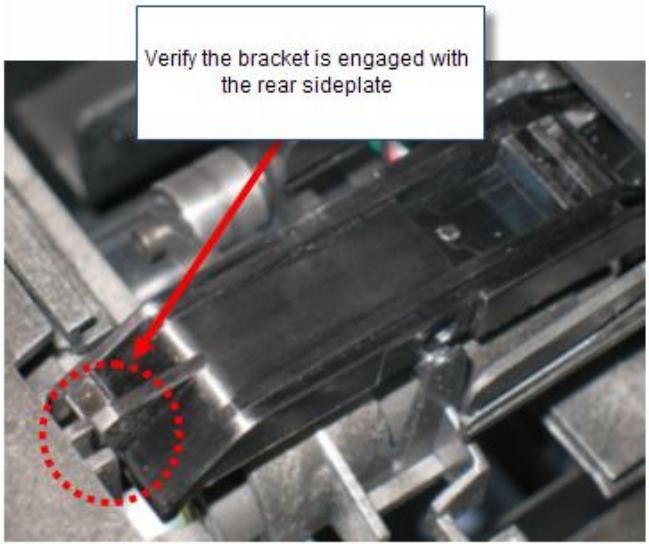


d. Tilt the spring upward and fit in to the slot provided. Some force is needed to snap the spring and tabs in place.

e. Click the Bracket into the frame.



f. Snap the Roller Bracket tabs to the Lift Bracket.

(continued on next page)

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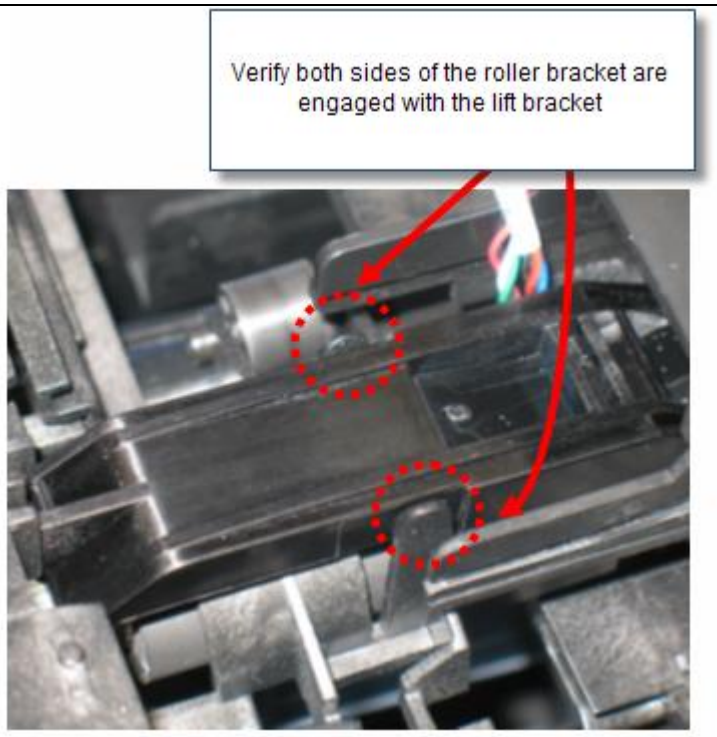

g. Procedure is complete.

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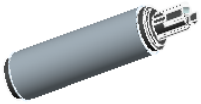
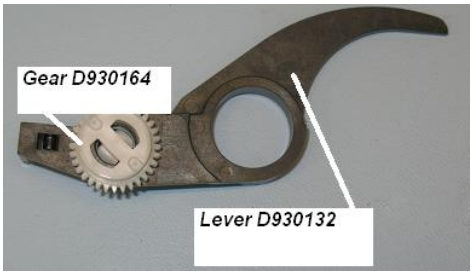
Remove/Replace the Cleaning Roller (D930121), Input Feed Lever (D930132), Input Lever Gear (D930164)



D930121

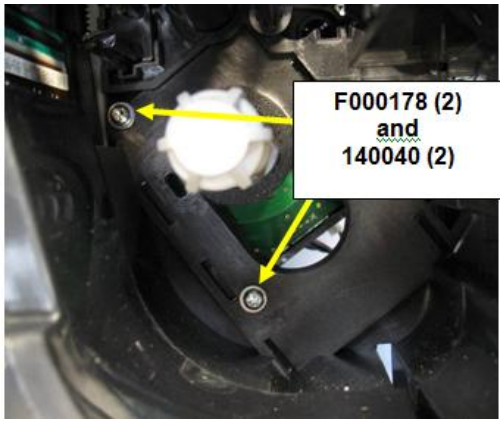


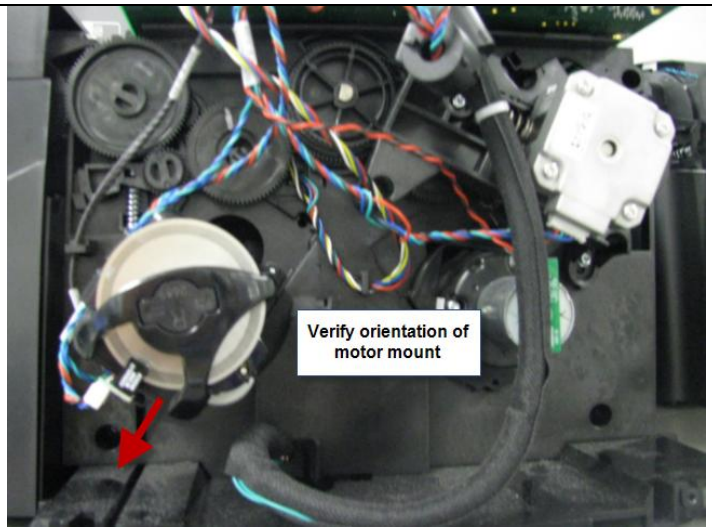
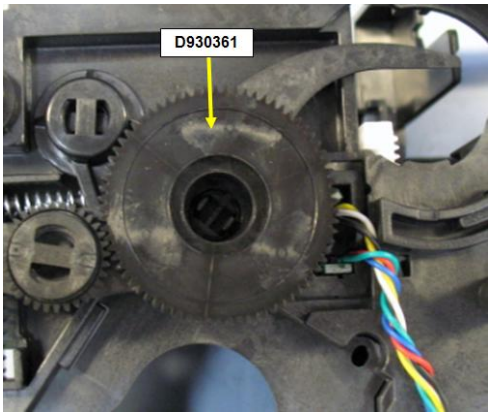
Tools needed: T10 Torx screwdriver

Estimated Repair Time: 30 min

Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the ribbon supply assembly.
3	Remove the mainboard (D930500)
4	Remove the screw F000178 & washer 140040 from the motor assembly. This is done from the front of the printer.  **NOTE:** This step is used for the DTC 1250e, 1000Me, 4250e
5	Slide the Supply Spindle DOWN To release. Slide the Motor UP to install. **NOTE:** You do not need to remove the gears or the Stepper Motor for this procedure.

Step	Procedure
	 **NOTE:** This step is used for the DTC 1250e, 1000Me, 4250e.
6	Remove the Cleaning Roller Gear (D930361) 
7	Remove the stepper motor assembly and belt (D930028)
8	Remove the pulley (e-clip) and washers.
9	Remove platen cam rotation. Locking bushing.
10	Remove the Lever. Be careful not to lose the spring. **NOTE:** How the spring is set into the pegs. The gear will pull straight out.

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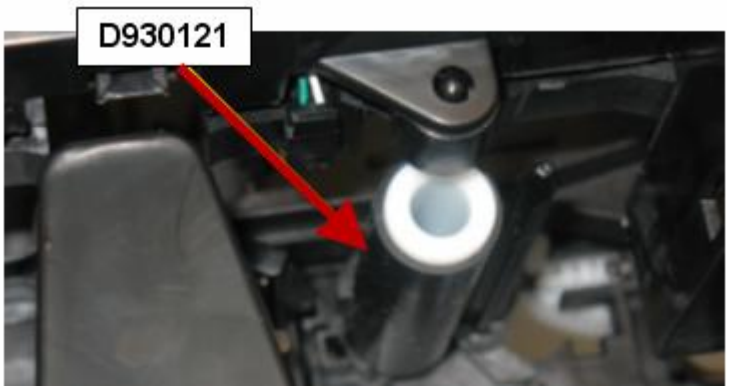
Step	Procedure
11	From the front of the printer release the cleaning roller from the peg by pushing all the way back and dropping the roller.  **NOTE:** Do not hold the roller by the rubber but only from the plastic shaft. The rubber can move out of position on the shaft and cause a print quality issue.
12	Replace with new roller.
13	Insert the Spring into the upper and lower pegs. Install the Lever then the Gear. Turn the black platen gear to verify the gears turn simultaneously.
14	Reinstall cam, locking bushing, stepper motor, ribbon supply assembly.
15	Procedure is complete.

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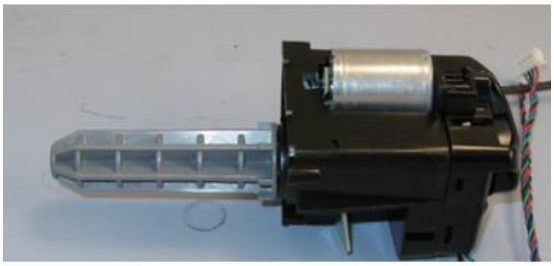
Remove/Replace Supply Spindle RFID Motor

DTC4500e- Light Gray Spindle Shaft- D930015



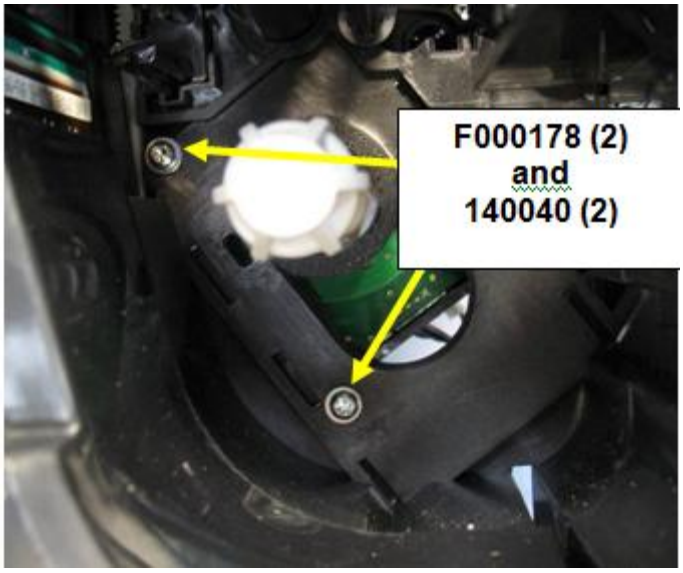
DTC1000Me, 1250e, 4250e Dark Gray Spindle Shaft - D9301501

Tools needed: T10 Torx screwdriver

Estimated Repair Time: 20 min

Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the screw F000178 & washer 140040 from the motor assembly. This is done from the front of the printer.  **NOTE:** DTC1250e/4250e will have 2 screws holding the Supply. DTC4500e has only one screw holding the supply.

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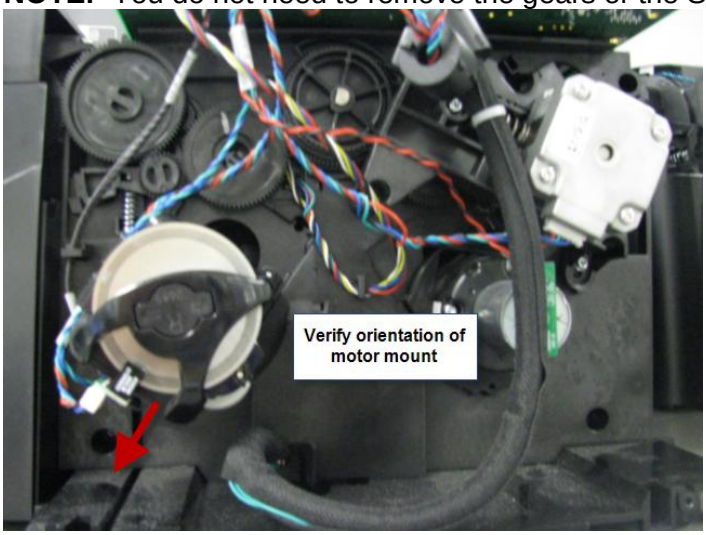
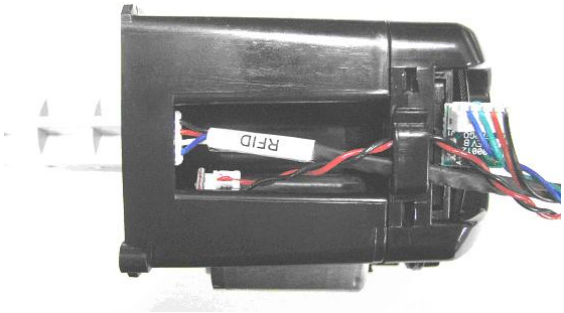
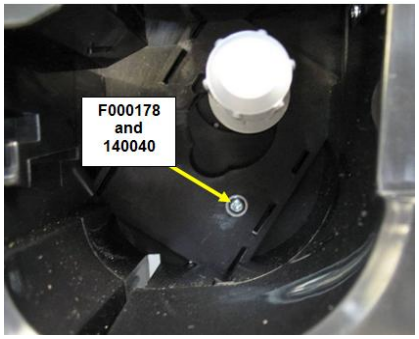
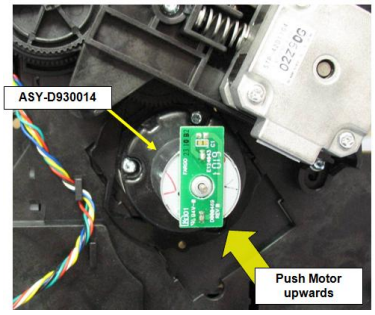
Step	Procedure
3	Slide the Supply Spindle DOWN To release. Slide the Motor UP to install. **NOTE:** You do not need to remove the gears or the Stepper Motor for this procedure.  **NOTE:** If ribbon wrinkle occurs after replacing the motor, move the motor assembly DOWN slightly in the frame. Loosen the 2- F000178 screws from the supply spindle, move down 1/16th inch then tighten the F000178 screws.
4	Remove the RFID cable (D930603) from the Supply Spindle. Remove the Encoder Sensor cable harness (D930600) from the encoder sensor. **NOTE:** The routing of these wires under the clip. 
5	Replace the complete assembly Motor. Reconnect wires.
6	Procedure is complete.

Remove/Replace Ribbon Take-Up Motor (D930014)

 D930014	**Tools needed:** T10 Torx screwdriver Estimated Repair Time: 20 min **Preparation:** Remove the Covers **Important:** This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the screw (F000178) & washer (140040) from the motor assembly. This is done from the front of the printer. 
3	Slide the Take-Up Motor DOWN to release. Slide the Motor UP to install. **NOTE::** You do not need to remove the gears or the Stepper Motor for this procedure. 

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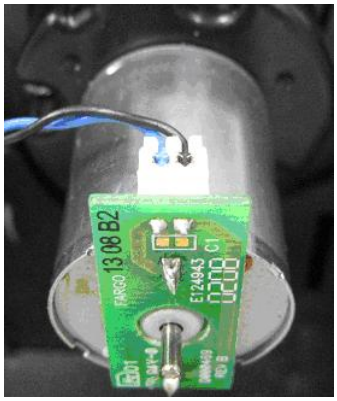
Step	Procedure
4	Remove the wire connection (D930600) harness from the top of the Take-Up Motor. 
5	Replace the complete assembly Motor.
6	Reconnect wires.
7	Procedure is complete.

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Remove/Replace Encoder Sensor (A930514) for RFID Supply Spindle

NOTE: For any other parts (motor/ encoder wheel) REPLACE COMPLETE ASSEMBLY (D930015).

A000365-01

Tools needed: Torx screwdriver and flat head screwdriver

Estimated Repair Time: 30 min

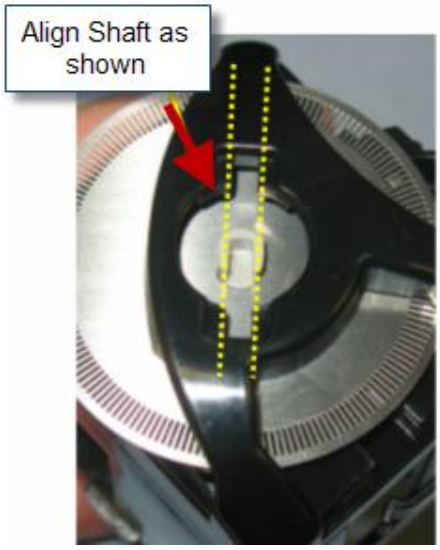
Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

RFID Cable	D930603
Encoder Sensor Cable	D930605

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove Supply Spindle-RFID assembly. Refer to: Remove/Replace Supply Spindle RFID Motor (D930015) DTC4500e OR Remove/Replace Supply Spindle RFID Motor (D930015) DTC1250e/4250e

.

Step	Procedure
3	Remove the Damper Cap (F000487) Use a thin flathead screwdriver to loosen one side. The cap will pop off. **NOTE:** Replace the Damper Cap by lining up the shaft first then snap the Damper Cap back on. Verify the gray shaft is pushed up to hold the encoder wheel in place. 

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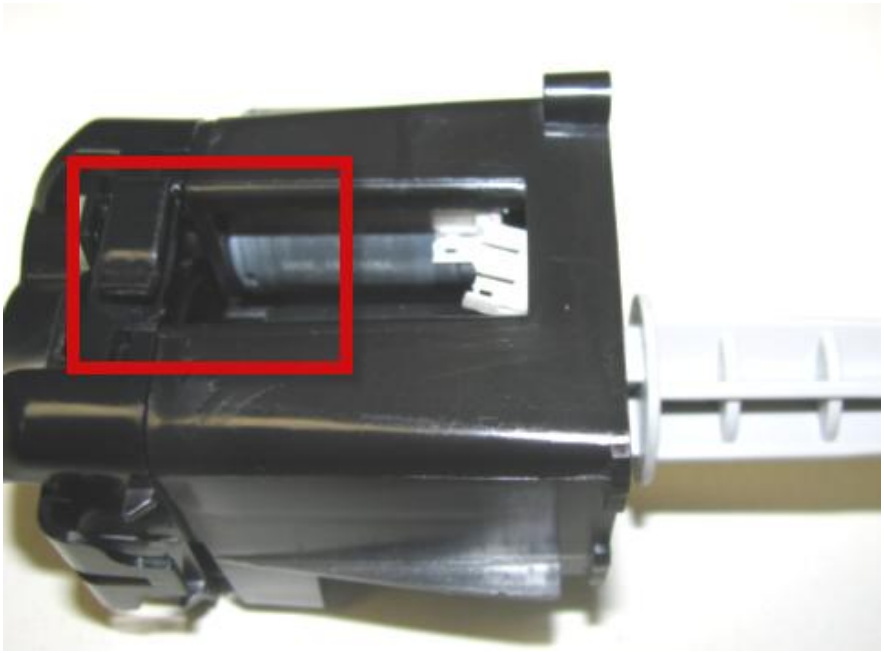
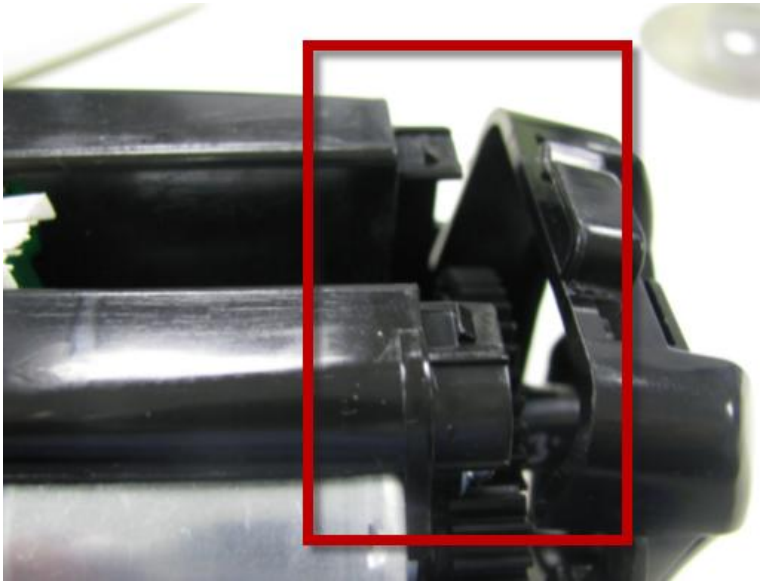
Step	Procedure
4	Remove the supply cover (D930116) by pulling up from the open end.  This will unlatch the tabs holding the cover to the frame. This allows for access to the sensor. 

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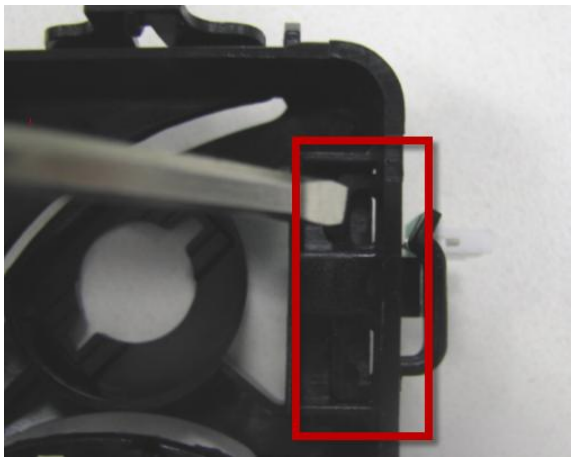
Step	Procedure
5	Remove the sensor. Use a thin flat blade screwdriver to unlatch the tabs holding the sensor to the frame. 
6	Press the new sensor into the assembly; make sure the encoder wheel is in between the sensor.
7	Replace with new Sensor (A930514) and/ or Cable (D930605)
8	Line up the sensor with the slot and snap back in. Reconnect cable to J18
9	Procedure is complete.

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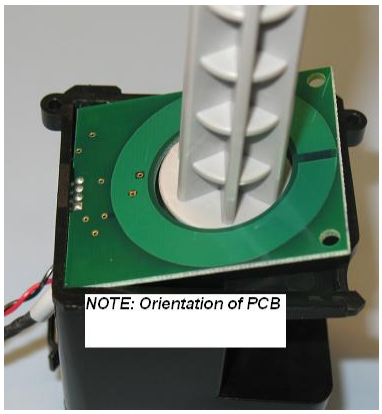
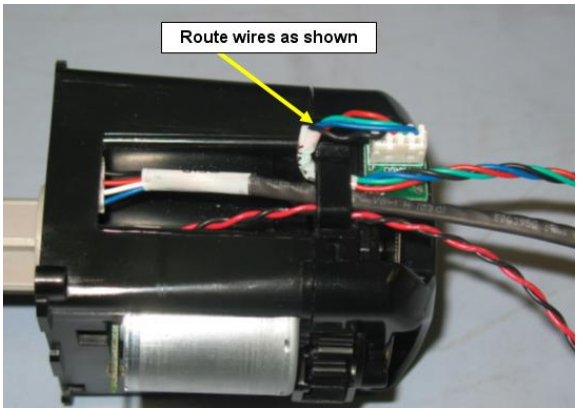
Remove/Replace the PCB board (A000365-01)

Step	Procedure
1	Remove Supply Spindle-RFID assembly. See procedure above (D930015). Un-snap the PCB from the frame. The PCB with the HOLES is set under the corner tabs. Lift up this end first. See picture below.
2	Replace with new PCB and/ or Cable.
3	Insert one end first then snap into the corner tabs. Replace cable to J9. 
4	For both procedures route the cables under the holding tab. 
5	Reverse assembly to reinstall parts
6	Procedure is complete.

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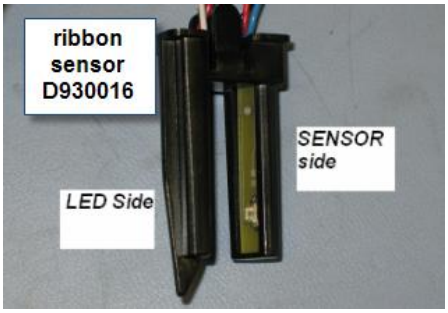
Remove/Replace Ribbon Sensor (D930016)



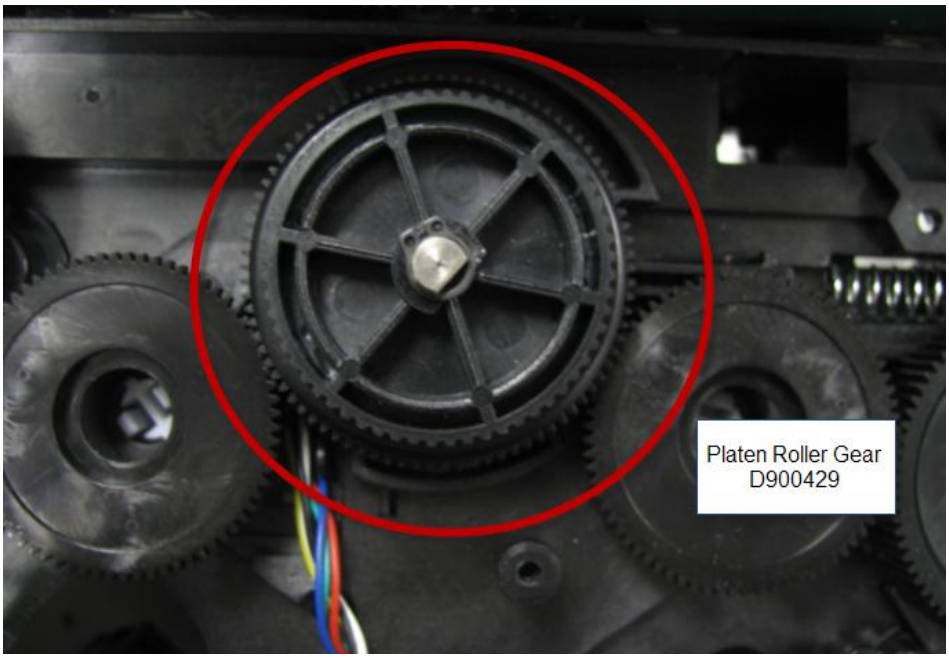
Tools needed: T10 Torx screwdriver

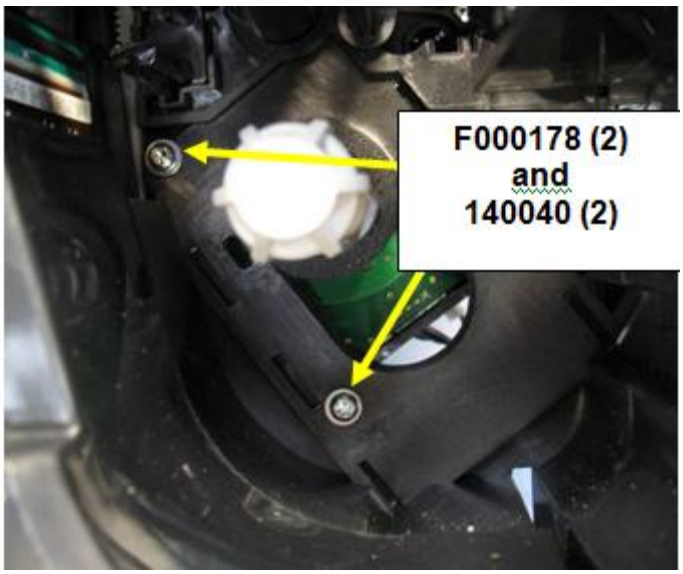
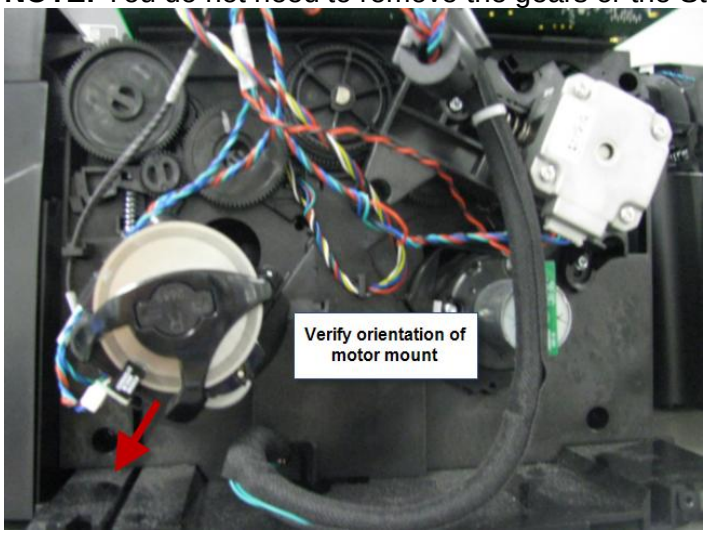
Estimated Repair Time: 30 min

Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

Ribbon Sensor Cable only D930608

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the Stepper Motor assembly first. See steps 4 & 5
3	Remove the Platen Roller Gears (D900429) to access the Ribbon Sensor. Remove the retaining ring (140048) and pull off the gear. 

Step	Procedure
4	Remove the screw F000178 & washer 140040 from the Stepper Motor assembly. This is done from the front of the printer.  **NOTE:** DTC1250e/4250e will have 2 screws holding the Supply. DTC4500e has only one screw holding the supply.
5	Slide the Supply Spindle DOWN To release. Slide the Motor UP to install. **NOTE:** You do not need to remove the gears or the Stepper Motor for this procedure.  **NOTE:** If ribbon wrinkle occurs after replacing the motor, move the motor assembly DOWN slightly in the frame. Loosen the 2- F000178 screws from the supply spindle, move down 1/16th inch then tighten the F000178 screws.

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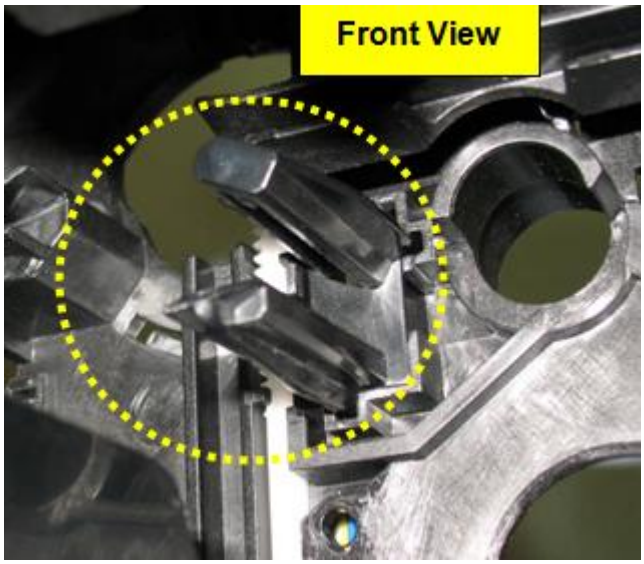
Step	Procedure
6	Remove the cleaning roller Gear (D930361) to access the Ribbon Sensor.
7	From the front of the printer: Pinch the tabs to help remove the sensor from the frame. PUSH the Ribbon Sensor back to release the tabs and remove the sensor. 

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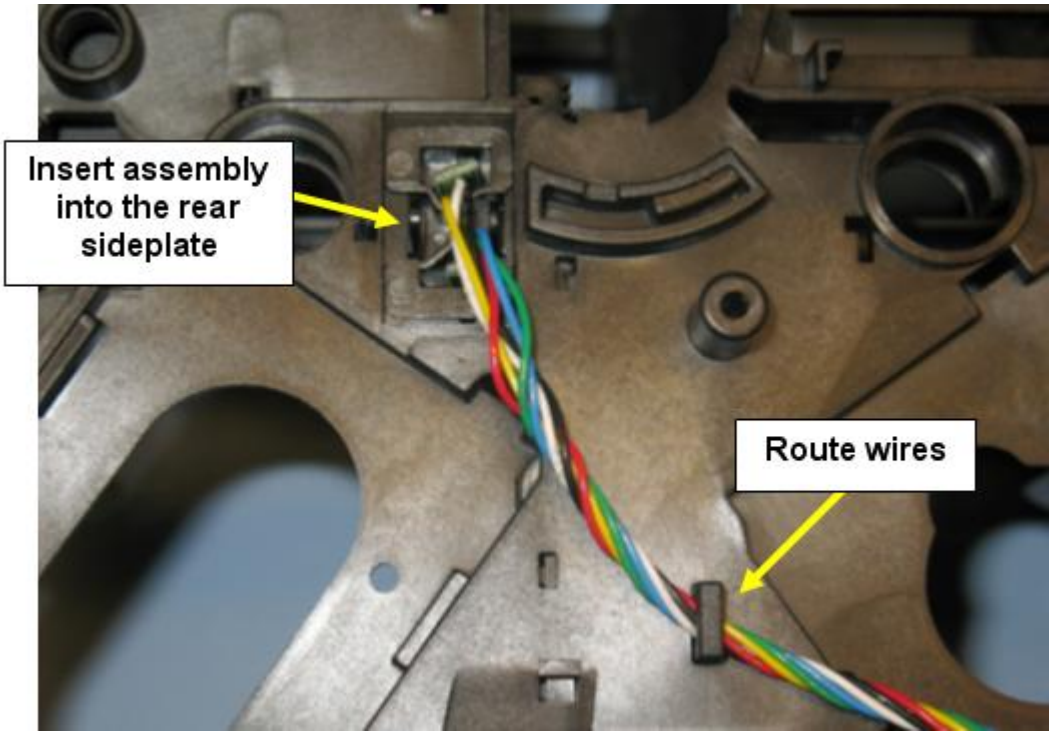
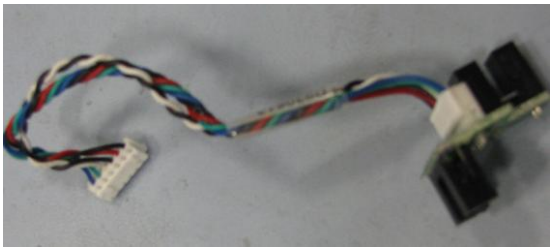
Step	Procedure
8	Replace with the new sensor. Push the sensor back in using the tabs to snap the sensor in place. This is done from the rear sideplate of the printer near the gears. Note: The wire routing to the frame. (Shown unpopulated for viewing) 
9	Reverse assembly to reinstall parts. Verify wave washer is in place.
10	Procedure is complete

Remove/Replace Card Path/Cover Sensor (D930613)

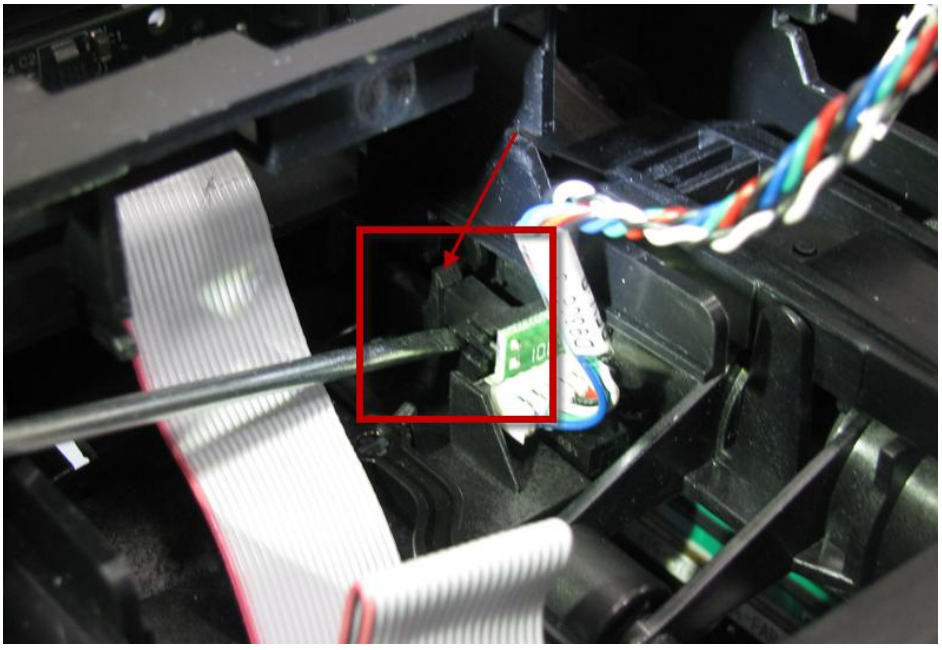


Tools needed: T10 Torx screwdriver

Estimated Repair Time: 30 min

Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the mainboard. Remove the J11 and J17 connector from the mainboard.
3	Use a small flathead screwdriver to GENTLY pry the sensor up. The sensor must be released from the small tab holding the sensor. (See the RED arrow) **NOTE:** Pry up on both sides of the sensor legs not just one side or it may break.  (The cable is shown on THIS side of the frame for clarity.)

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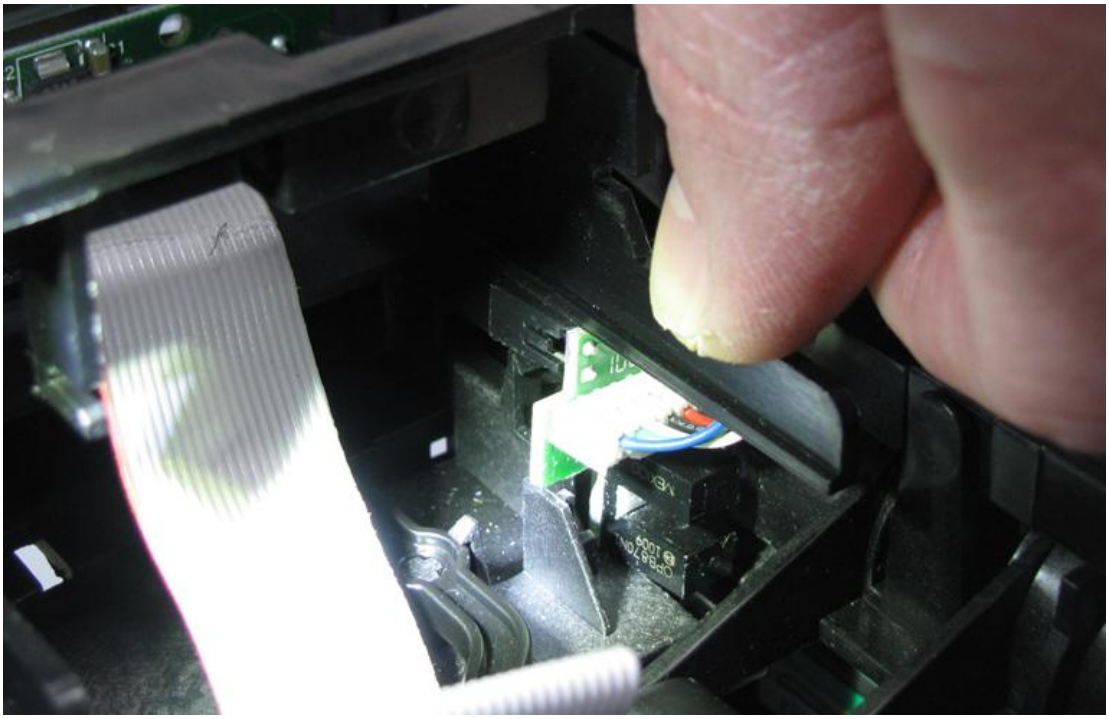
Step	Procedure
4	Replace with the new sensor. Line up the sensor and push down to snap it in place UNDER the small tab. Route the cable on the right side of the frame as shown in the picture below. Connect to the mainboard Reverse assembly to complete the procedure. 

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Parts Replacement - Dual-Sided Printing Module

D930010-04 (Short Module) used for DTC1250e Flipper complete assembly

D930010-06 (Short Module) used for DTC4250e & 4500e Flipper complete assembly

MDP-00104 (Tall Module) used for DTC4500e Flipper complete assembly

IMPORTANT NOTE: The Flipper Table should be level when the Printer is powered up. If the Flipper Table is at an angle, open the access door and manually level it. Then cycle the Printer Power to reset.

Remove all covers to access the Flipper Parts Replacements

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Remove/Replace the Flipper Cover

Short Dual-Sided Printing Module shown

D930010-06

Tools needed: T10 Torx screwdriver

Estimated Repair Time: 15 min

Preparation: Remove the top cover of the Printer and Dual-Sided Printing Module from the Printer

Important: This procedure can only be performed by authorized service personnel.

Short & Tall use common parts

Top cover	D930192-01	DTC4250e/4500e
Top Cover	D930192-03	DTC1250e
Card Bin	D930193-01	DTC4250e/4500e
Card Bin	D930193-03	DTC1250e
Flipper Door	D930194-01	

The Tall Dual-Sided Printing Module uses the Lamination Cover

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer. Caution: Please be careful not to force any of the snapping parts as they could break with too much pressure. When replacing the Covers or any parts, do NOT pinch any wires.
2	Remove the Top Cover of the printer. Remove the Dual-Sided Printing Module from the printer.

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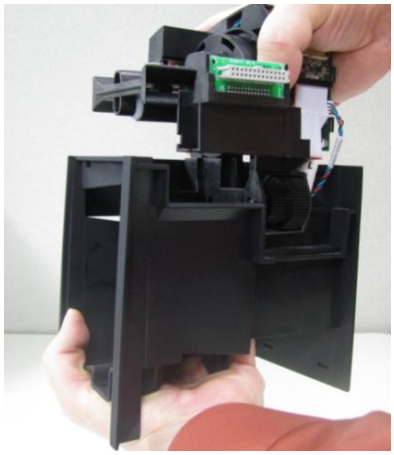
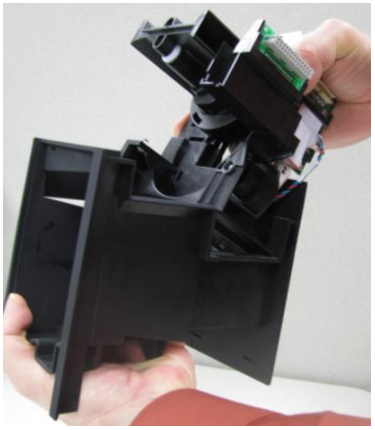
Step	Procedure
3	Remove the Dual-Sided Printing Module Top Cover. Grasp the cover from the open end and tilt forward to unlatch the front tabs.
4	Remove the Flipper Base Cover: Turn the module over and use a T10 Torx screwdriver to remove the 2 screws of the bottom plate.
5	Grasp the module with 2 hands and tilt back and up. **TIP:** Use your hand from underneath to push the inner wall OUT for easier release of the tabs.  

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Step	Procedure
6	The module is now ready to replace any of the following parts: Flipper Table with gear and rollers (D930611) Stepper Motor (E001192) with Gear connects to J5 Stepper Motor (E001192) Cable (D930610) PCB Output Controller-Main Board (D930503) Lead Screw Assembly (D930155) used for SHORT Module Lead Screw Assembly (D930176) used for TALL Module Lead Screw Assembly Gear used for both Short and Tall (D930106) Headlift Sensor & cable (D900113) connects to J3 HOME IR Sensor Pair include Detector (Upper & Lower sensor with cable connects to J4 CARD) Both IR sensors connect to ONE cable and are replaced at the same time. (D930609 used for SHORT Module. D930614 used for TALL Module) Ribbon Cable (D930611) connects Flipper to printer

.

Remove/Replace the Flipper Table (D930011)

Tools needed: T10 Torx screwdriver

Estimated Repair Time: 20 min

Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the Covers.
3	Remove the Bushing Screw Twist. Twist to unlock and lift off.

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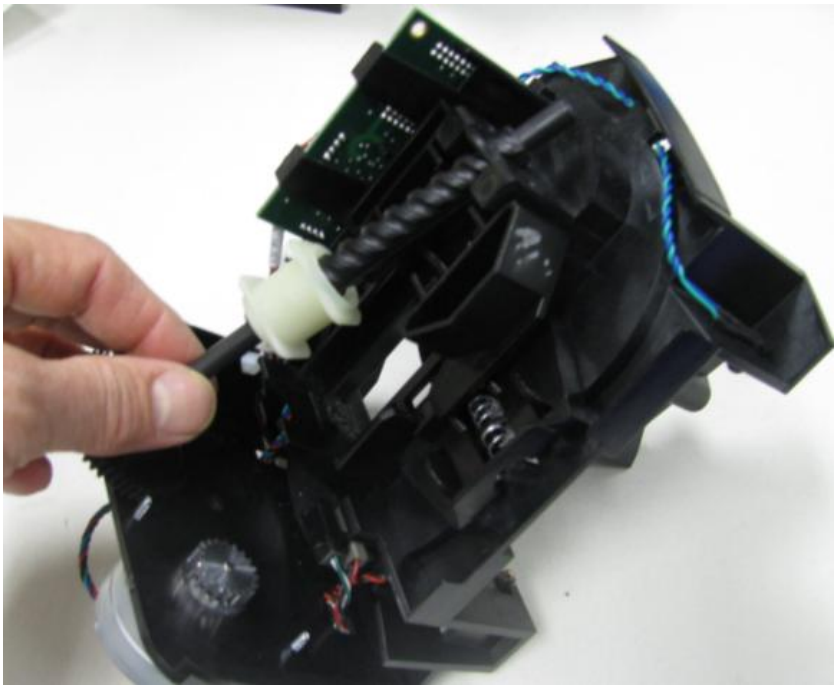
Step	Procedure
4	Remove the Lead Screw Assembly by pushing UP and pulling OUT from the bottom at an angle.  Short Lead Screw D930155 Tall Lead Screw D930176

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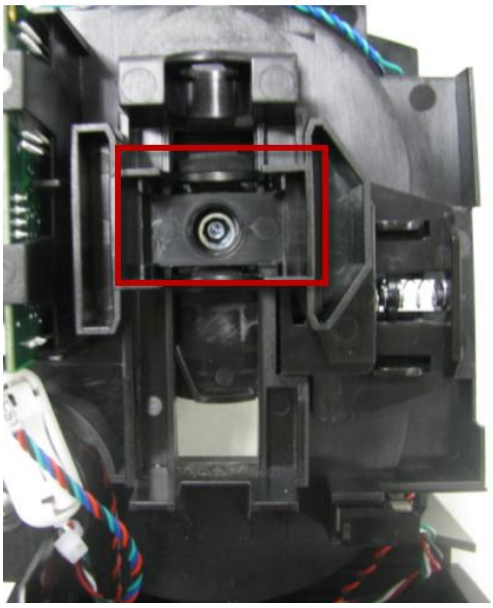
Step	Procedure
5	Remove the one screw that holds the Flipper Table to the Bracket Table Mount 
6	Remove the Flipper Table.
7	Reverse assembly to install new Flipper Table. Verify Lead Screw and Lead Pin is set correctly. Also see step 8 for spring and washer placement. Push down on the top of the lead screw to set into the gear.

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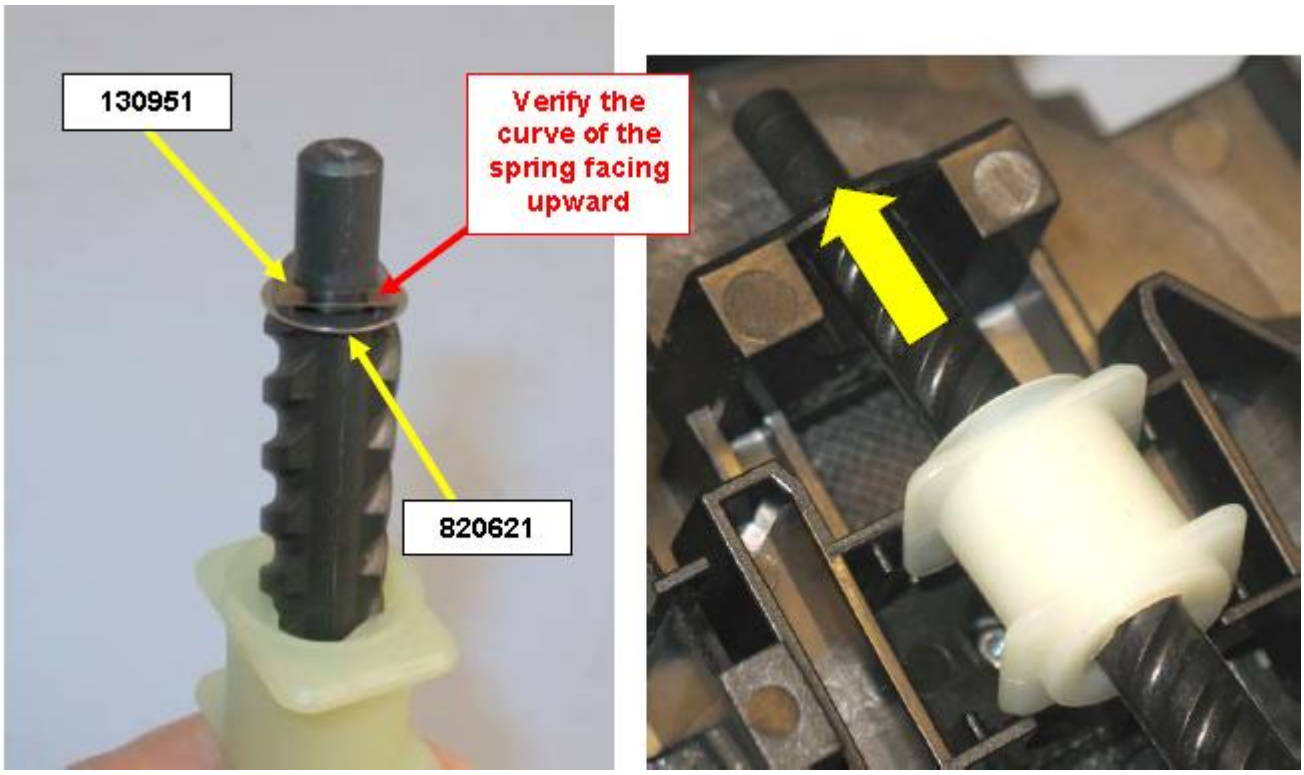
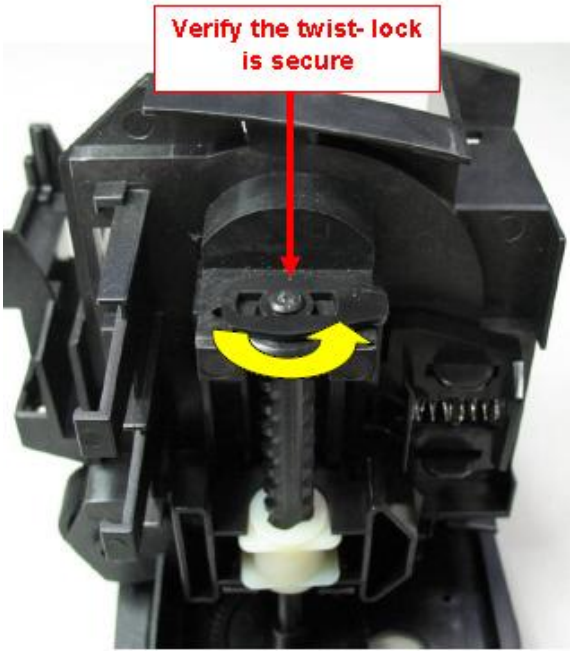
Step	Procedure
8	Verify the Lead Screw Assembly has the washer and spring in the correct position. 
9	Replace the twist lock. 

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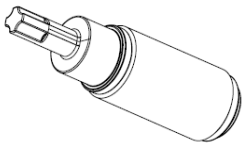
Remove/Replace the Flipper Feed Roller (D930149), Pinch Roller D920013 & F000338)

Pinch Roller Gears (D30165 & D930166)



D930149

D920013 + F000338

D930165 (3 used)

D930166

Tools needed: T10 Torx screwdriver

Estimated Repair Time: 20 minutes

Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Start with the instruction for replacing the Flipper Table.

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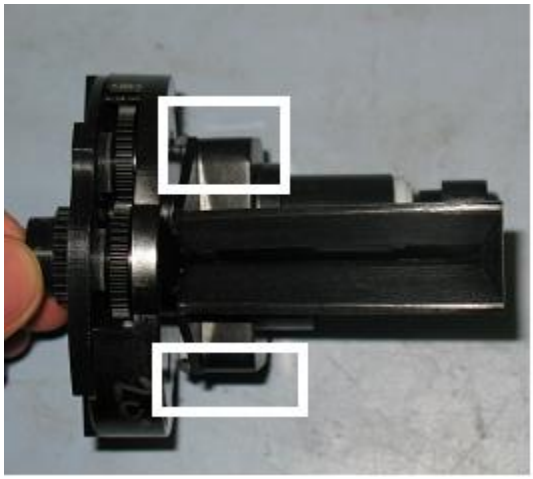
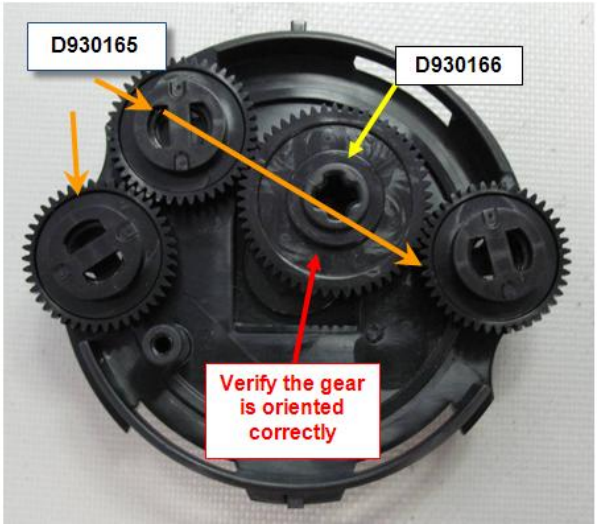
Step	Procedure
3	Remove the Flipper Table from the Base Bracket by pinching the 2 side tabs inward to release the table from the base. 
4	Card Feed Roller (D930149) - Replace with the new Roller. Line up the roller and the tab slots and push together. Verify the roller spins freely and turns the gears.

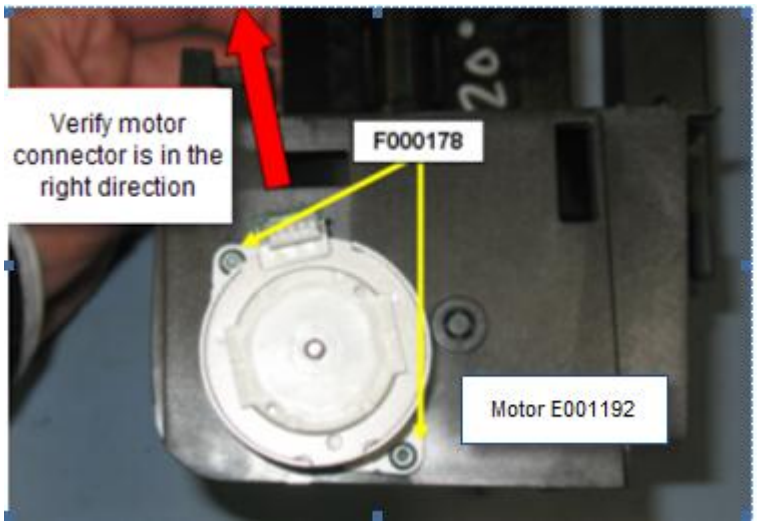
.

Step	Procedure
5	Pinch Roller (D920013) Insert spring into the roller and line up one end at a time.
6	Gear (D930165 –D930166) placement shown below for pivot bracket. Verify the assembly is fully snapped together if these are replaced. 
7	When re-assembling the table verify the LEAD Screw and gears move freely up and down and can rotate the table.
8	Replace the Bushing Screw Twist Lock to secure the Lead Screw.
9	Procedure is complete.

.

Remove/Replace the Flipper Assembly Stepper Motor – E001192

	Tools needed: T10 Torx screwdriver Estimated Repair Time: 20 min **Preparation:** Remove the Covers **Important:** This procedure can only be performed by authorized service personnel. Stepper Motor Cable (D930610)

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the Flipper Covers.
3	Disconnect the cable (D930610) from J5 on the PCB. If replacing this cable make **NOTE:** of how the wire is routed.
4	Remove the 2 screws (F000178) that hold the motor to the frame. 
5	Replace with new motor
6	Procedure is complete

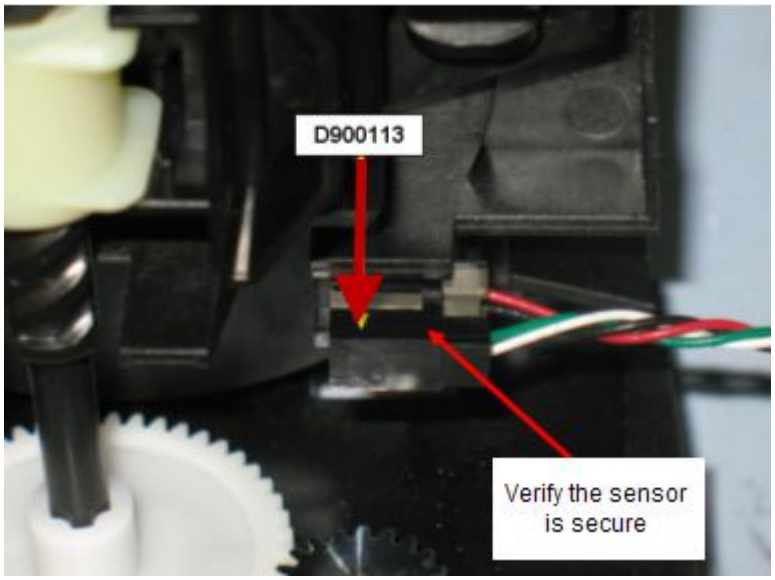
Remove/Replace the Headlift Sensor/Cable- D900113

Tools needed: T10 Torx screwdriver

Estimated Repair Time: 20 min

Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the Flipper Covers.
3	Pull the Headlift Sensor OUT towards the stepper motor gear to release from the frame. Sensor does not come out with breaking the sensor or tab. 
4	Replace sensor by snapping IN the slot provided.
5	Reverse assembly
6	Procedure is complete

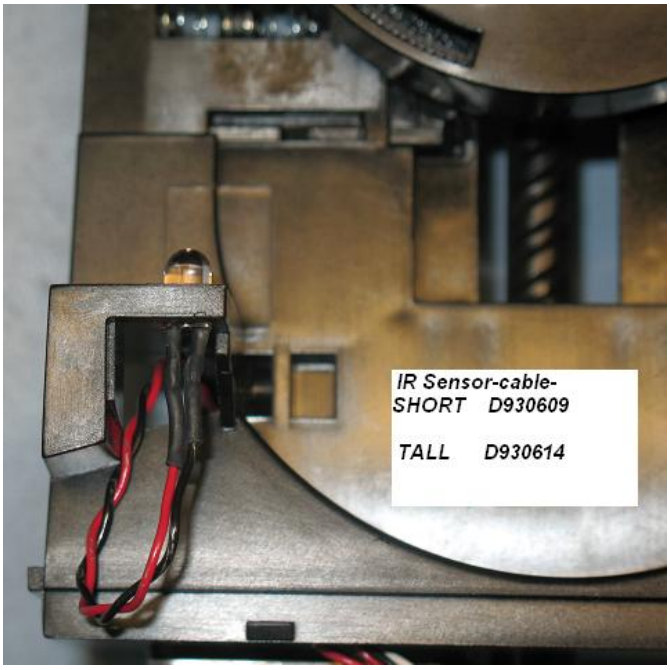
Remove/Replace the IR Sensors D930609 (short) D930614 (tall)

Tools needed: T10 Torx screwdriver

Estimated Repair Time: 20 min

Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the Flipper Covers.
3	Push the sensor out using some pressure. This sensor snaps in and out. Do not use a metal tool or it may damage the sensor.
4	Replace both upper and lower sensor at the same time.
5	Connect to J4 on the PCB. Make **NOTE:** of wire routing. 

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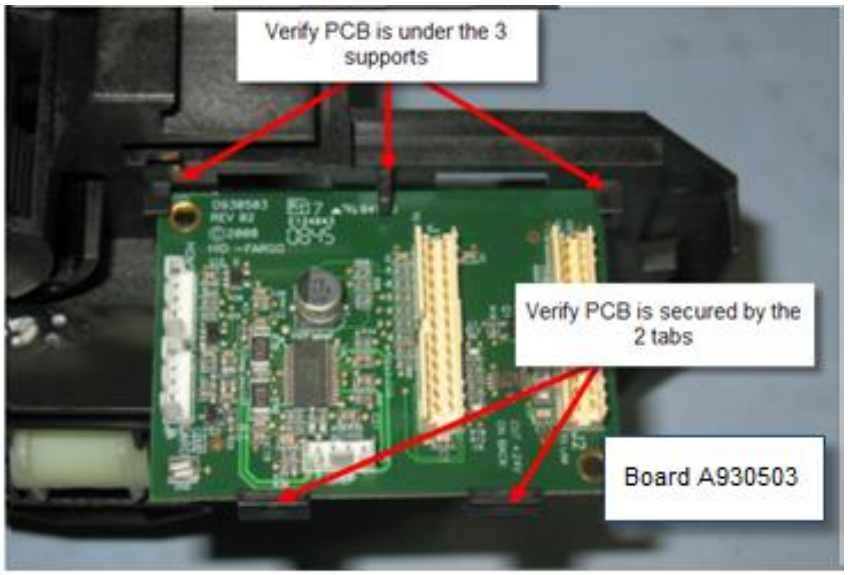
Remove/Replace the PCB Output Controller -A930503

Tools needed: T10 Torx screwdriver

Estimated Repair Time: 20 min

Preparation: Remove the Covers

Important: This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the Flipper Covers.
3	Disconnect all cable connections
4	Hold the 2 tabs BACK to release the board from the holding tabs. 
5	Replace with new board.
6	Procedure is complete

Parts Replacement- Lamination Module

Remove/Replace the Lamination Module Mainboard

Tools needed: T10 Torx screwdriver

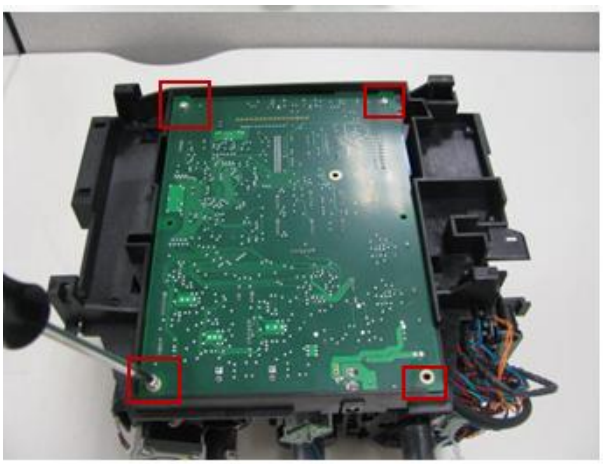
Estimated Repair Time: 20 min

Preparation: Remove the Lamination Module Covers

Important: This procedure can only be performed by authorized service personnel.

DTC4500e (single side) A920221-11

DTC4500e (dual side) A920221-12

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Remove the Lamination Module from the printer base to access the mainboard.
3	Turn the module up-side down to access the 4 screws (F000178) that hold the mainboard to the frame. Remove the 4 screws.  Use caution when removing the mainboard so the power connector does not get damaged. Slide the board away and out from the frame.

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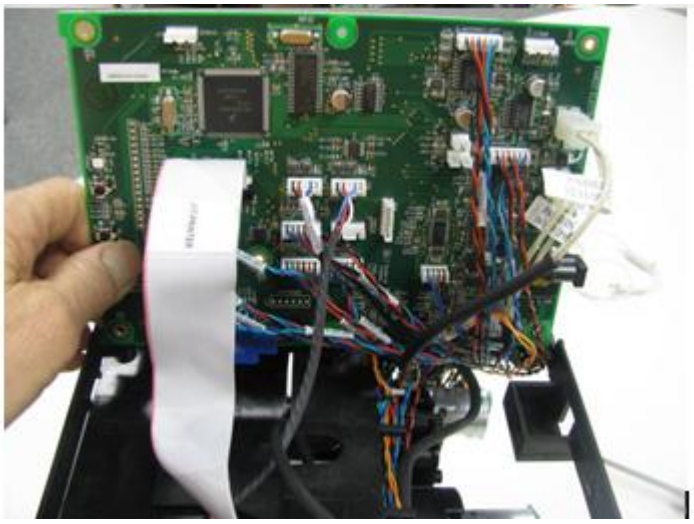
Step	Procedure
4	Remove all the wire connections. Tilt the mainboard up to access the wires. Wires are labeled with the numbered location for easy replacement. (Refer to Appendix B for wire/board locations) 
5	Replace with the new mainboard using reverse assembly. **NOTE:** Use caution not to damage the power connector.

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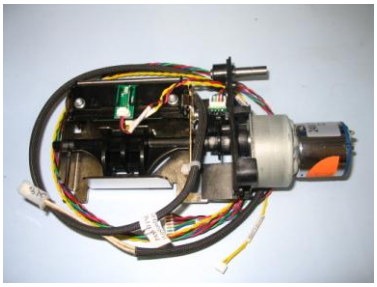
Remove/Replace the Lamination Head Assembly

Upper Assembly (D920022) & Lower Assembly (D920023)



This part is sold as one assembly which includes :

Platen Roller (D920012-Upper),

Lamination Roller (D920020- Lower),

Film LED (A000454)

Head Lift Sensor (A000126)

Thermocouple RTD/cable (D920151)

Motor (D900484-05) and the wires.

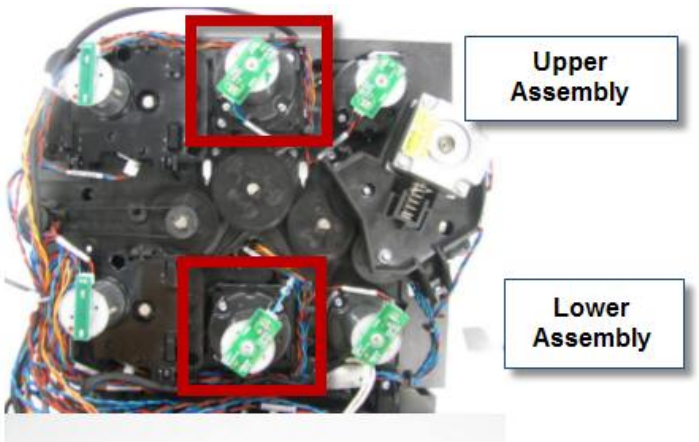
Tools needed: T10 Torx screwdriver

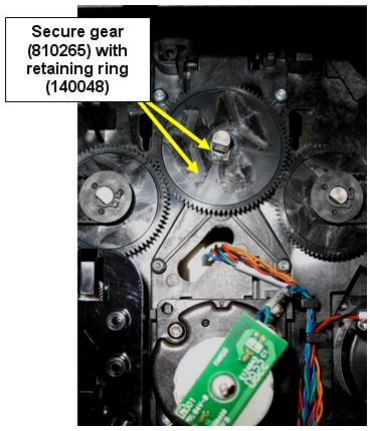
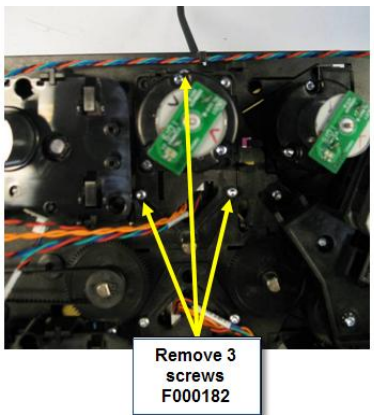
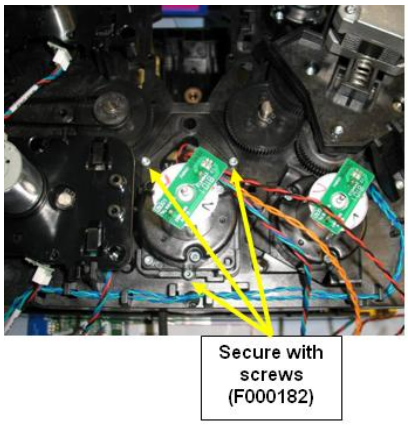
Estimated Repair Time: 35 min

Preparation: Remove the Lamination Module Covers.

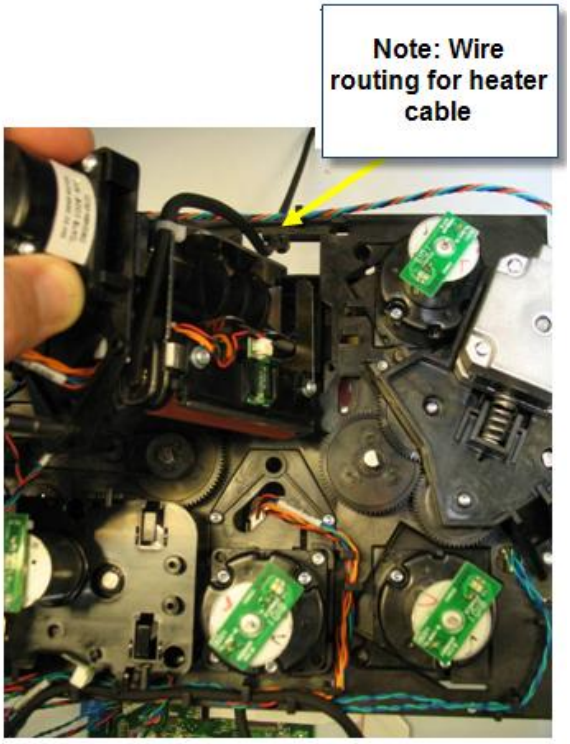
Remove the mainboard to access the wire removal procedure.

Important: This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Both the Upper and Lower Lamination Assemblies follow the same procedure. 

Step	Procedure
3	Remove the Retaining Ring (140048) and Platen Drive Gear (810265) 
4	Remove the 3 screws (F000182) that hold the assembly to the frame.  Upper Module  Lower Module

.

Step	Procedure
5	With the Mainboard loosened and tilted back the wire connections are now accessible. Locate the Lamination Head Assembly wire connections. Remove these wires from the mainboard. Location of Upper Lam Head Cables Lift Sensor D920156 connects to J4 Heater Cartridge D920113 connects to J9 RTD Cable D920151 connects to J18 Location of Lower Lam Head Cables Lift Sensor D920156) connects to J21 RTD Sensor Cable D920151 connects to J17 Heater Cartridge Cable D920113 connects to J3
6	Remove the Lamination Module assembly. Replace with new Lamination Module assembly using reverse assembly procedure.
7	Make **NOTE:** of how the wires are routed. **UPPER ASSEMBLY**  (continued next page)

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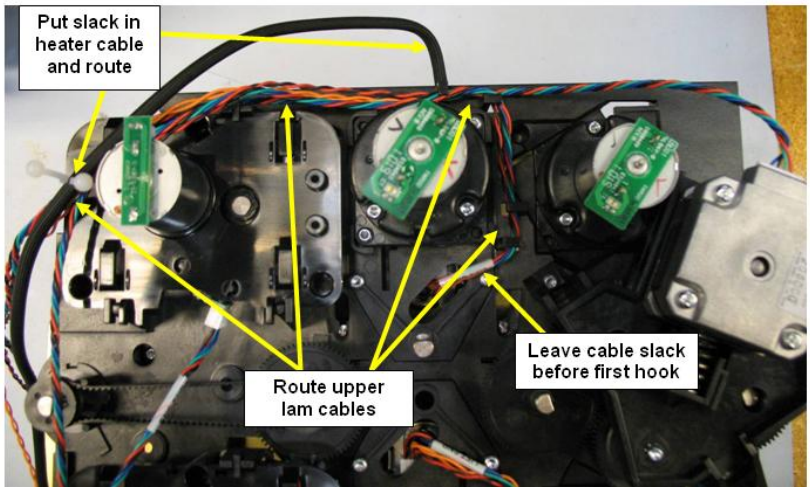
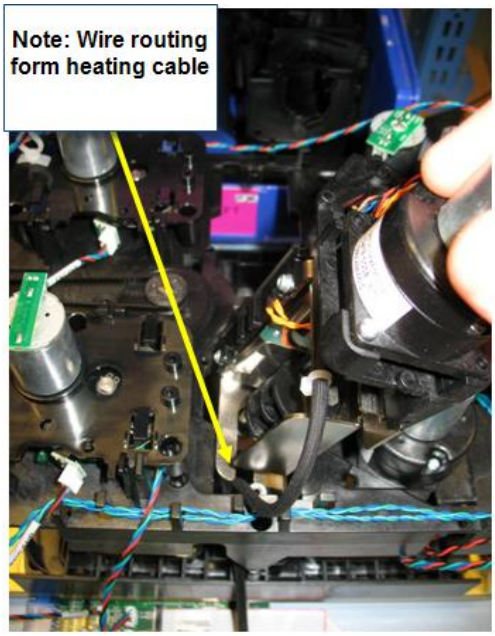
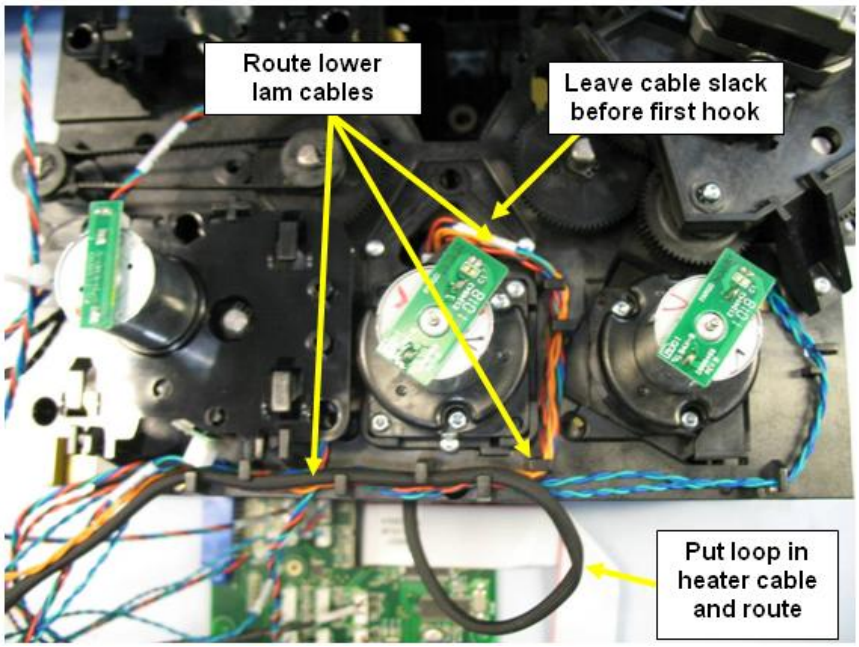


NOTE: Ensure there is cable slack between the lam head and the upper wire clip to allow free movement of the lam head. Do not pinch any wires.

8 Make **NOTE:** of how the wires are routed. **LOWER ASSEMBLY**



(continued next page)



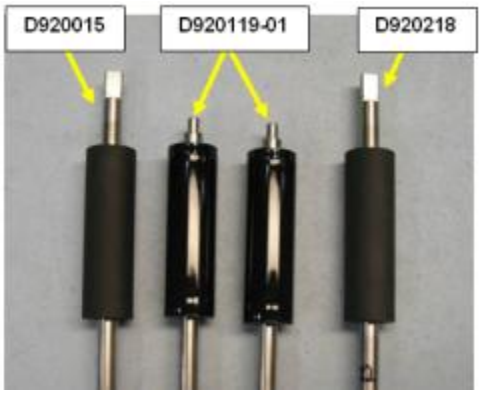
NOTE: Ensure there is cable slack between the lam head and the lower wire clip to allow free movement of the lam head. Do not pinch any wires.

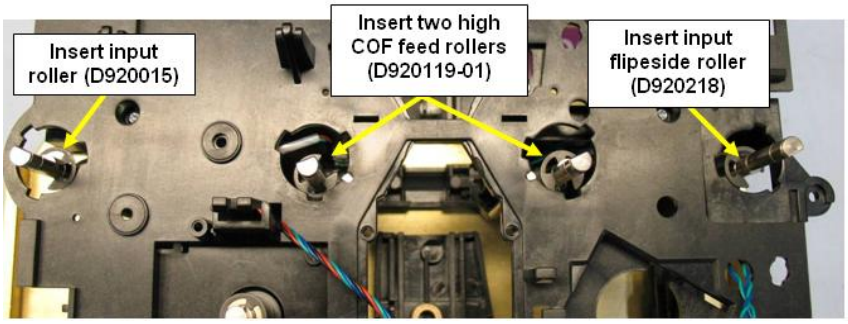
Remove/Replace the Lamination Module Rollers

Roller- Feed High Cof (D920119-01)

Roller- Input Flipside (D920218)

Roller- Input (D920015)





Roller placement shown

Tools needed: T10 Torx screwdriver

Estimated Repair Time: 30 min

Preparation: Remove the Lamination Module Covers.

Important: This procedure can only be performed by authorized service personnel.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.

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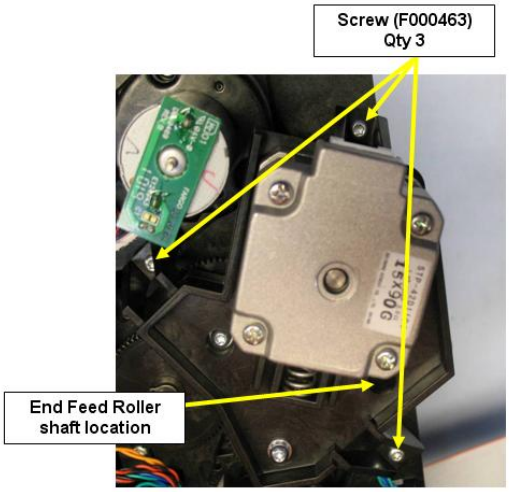
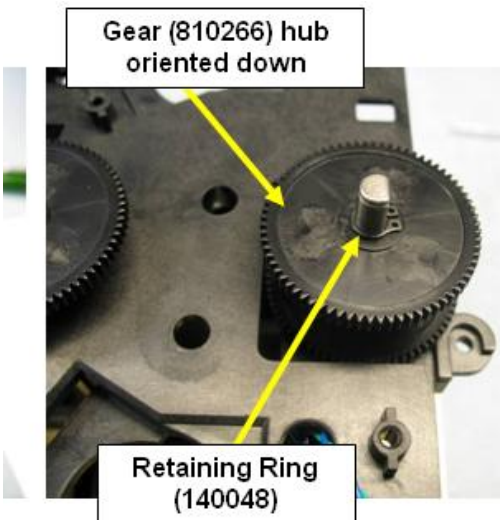
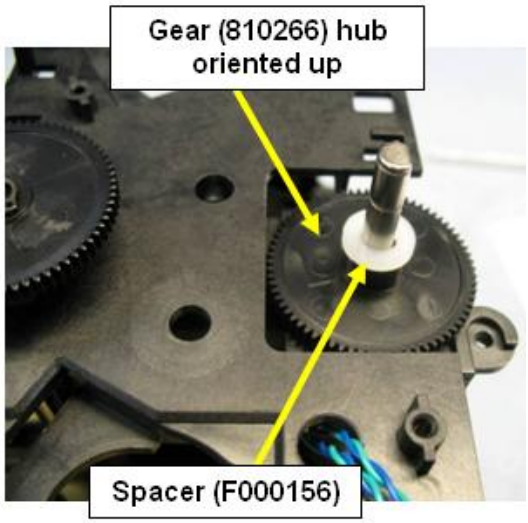
Step	Procedure
A-2	To replace D920218, Input Flipside Roller Remove the 3 screws (F000463) from the Stepper Motor Assembly.  **NOTE:** Wire Routing
A-3	Remove the retaining ring (140048) gear (810266) , white spacer (F000156) and gear (810266)  

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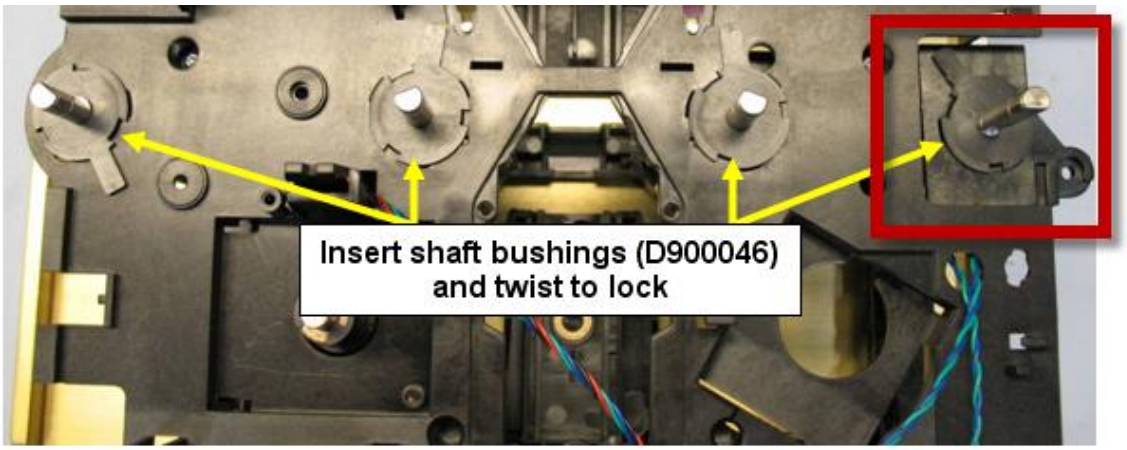
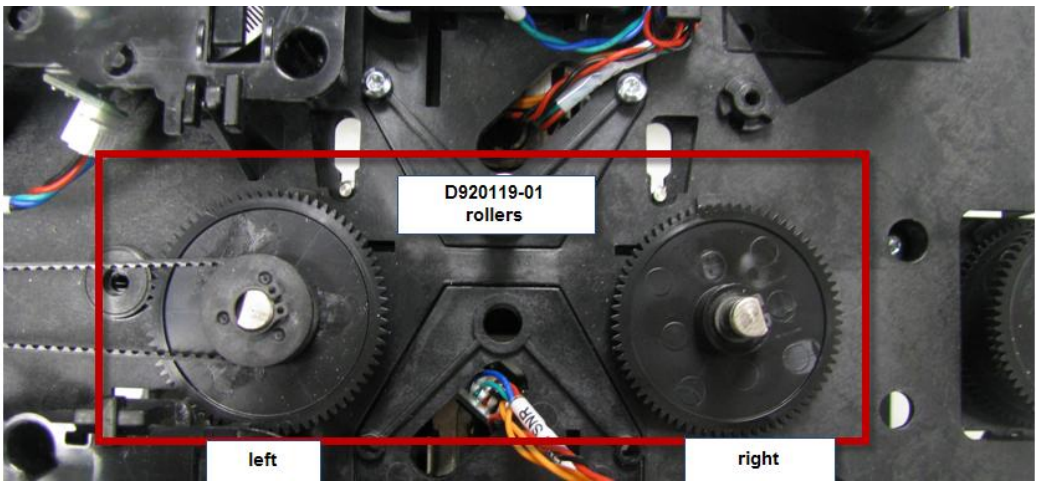
Step	Procedure
A-4	Unlock the shaft bushing (D900046) by twisting it counter clock wise. (TIP: Lift UP on the tab to unlock the pin underneath the tab.) 
A-5	Replace with the new roller (D920218). Insert and secure into the brass bushing on the frame. Use the E CLIP from the old roller. Make **NOTE:** of how this is placed on the roller.
A-6	Reverse assembly to complete the roller replacement.
	Replacing the Rollers (continued)
B-1	To replace D920119-01, High COF Feed Roller (Right Roller) 

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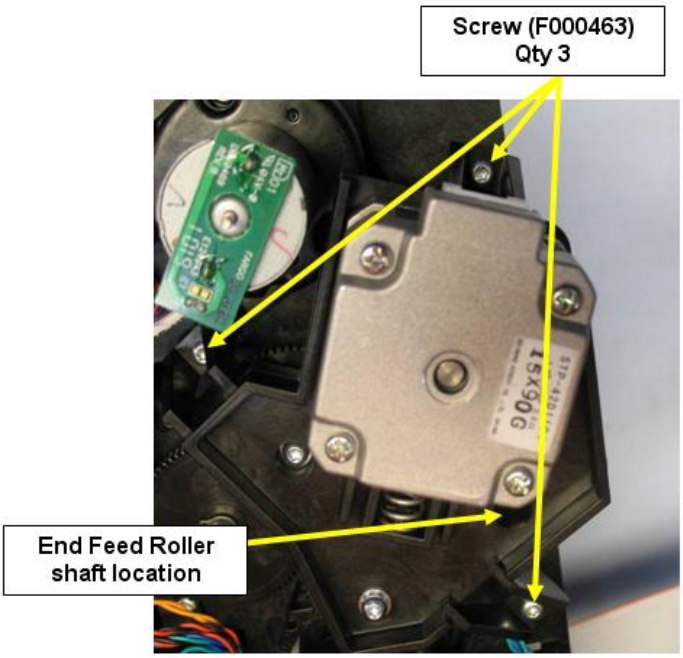
Step	Procedure
B-2	Remove the 3 screws (F000463) from the Stepper Motor Assembly in order to remove the roller on the right. 

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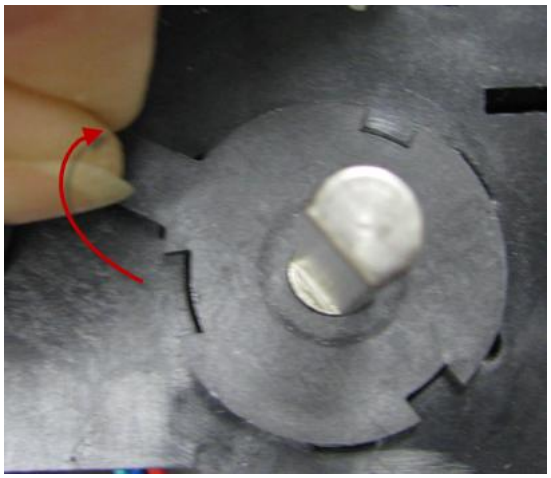
Step	Procedure
B-3	RIGHT ROLLER: Remove the retaining ring (140048) and Gear (8180266).
B-4	Remove the Shaft Bushing. (D900046)  Unlock the shaft bushing (D900046) by turning it counter clock wise. (TIP: Lift UP on the tab to unlock the pin underneath the tab.)
B-5	Pull out the roller (D920119-01).
B-6	Replace with the new roller (D920119-01). Use the E CLIP from the old roller. Make **NOTE:** of how this is placed on the roller.
B-7	Reverse assembly to complete the roller replacement.

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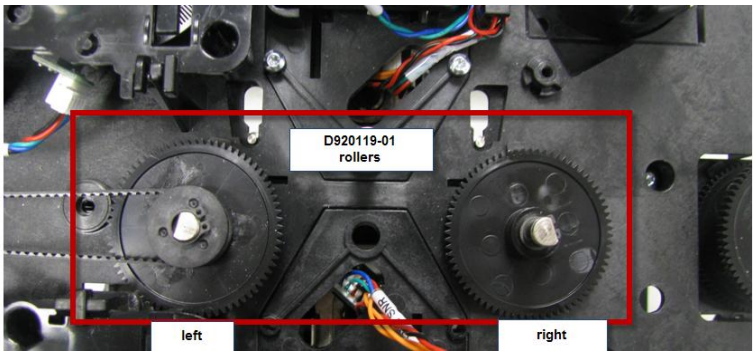
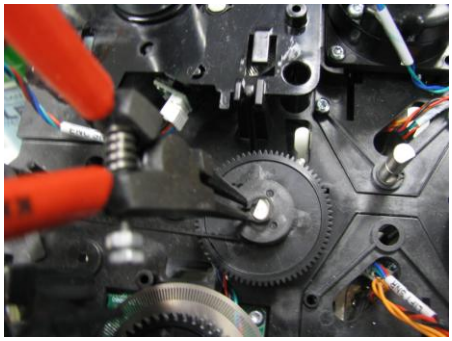
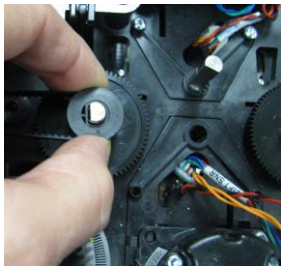
Step	Procedure
	Replacing the Rollers (continued)
C-1	To replace D920119-01, High COF Feed Roller (Left Roller) 
C-2	Remove the Lower Rewind Assembly to access the Left roller (D920119-01). Remove/Replace the Rewind Motor Assembly RFID Board A000365-01
C-3	LEFT ROLLER: Remove the retaining ring (140048) 
C-4	Remove the pulley (D850190).  TIP: When replacing the roller also replace the pulley D850190) for best results.

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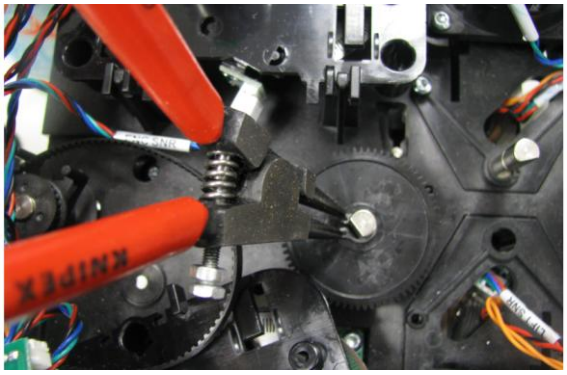
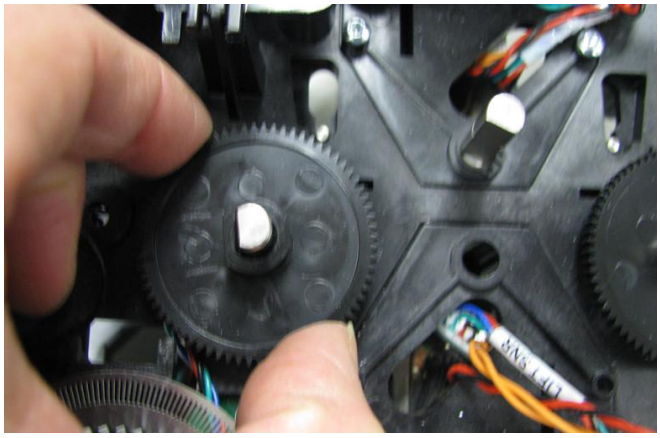
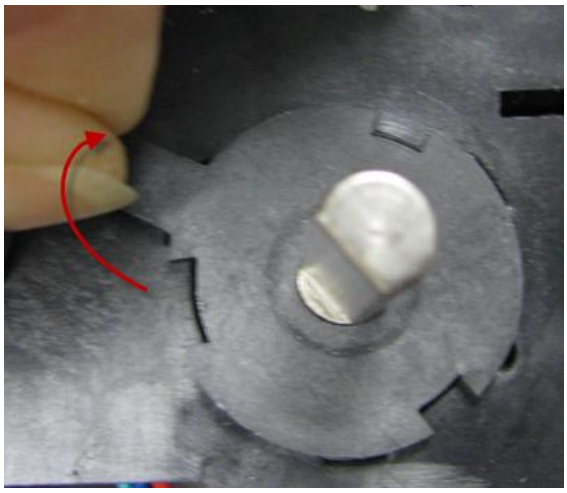
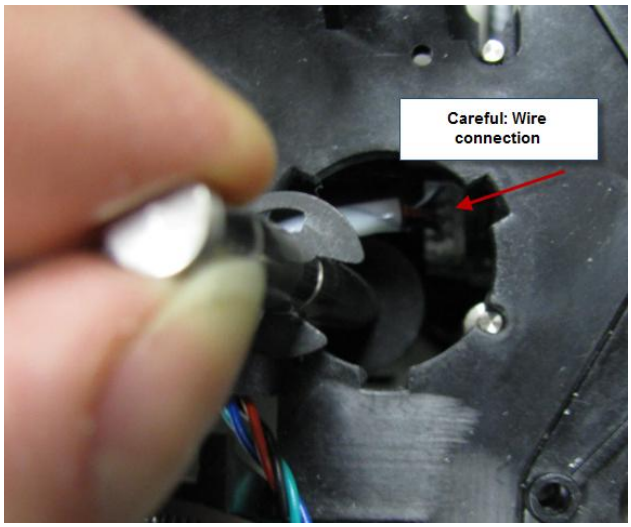
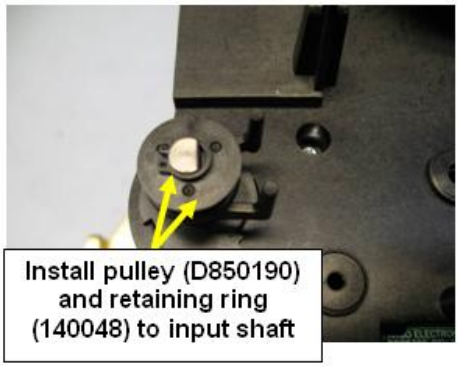
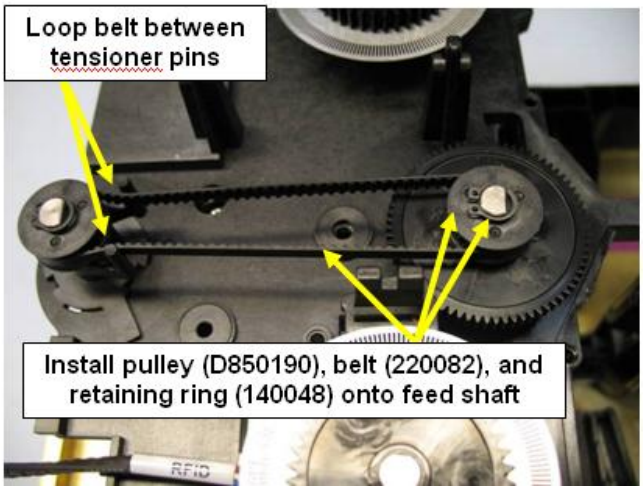
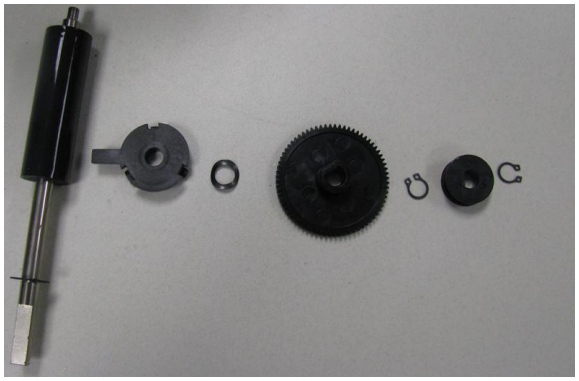
Step	Procedure
C-5	Remove the next retaining ring (140048). 
C-6	Remove the gear (810266). 
C-7	Remove the wave washer (130951). **NOTE:** Orientation of wave washer- concave side down when replacing.

.

Step	Procedure
C-8	Remove the Shaft Bushing. (D900046)  Unlock the shaft bushing (D900046) by turning it counter clock wise. (TIP: Lift UP on the tab to unlock the pin underneath the tab.)
C-9	Remove the roller (D920119-01) 
C-10	Replace with the new roller (D920119-01). Use the E CLIP from the old roller. Make **NOTE:** of how this is placed on the roller.

.

Step	Procedure
C-11	Reverse assembly to complete the roller replacement. A new belt (220082) may be replaced if necessary.
C-12	TIP: Orient the flat side of the shaft facing RIGHT on both rollers when replacing the pulley.  
C-13	Shows order of parts when replacing. 

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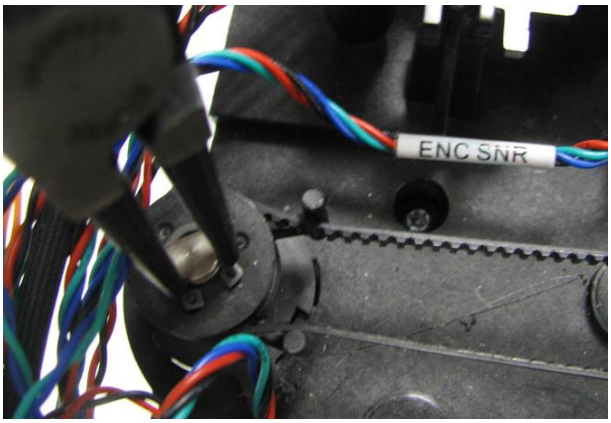
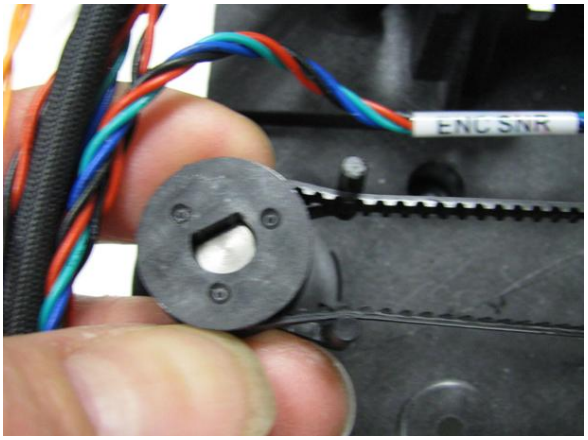
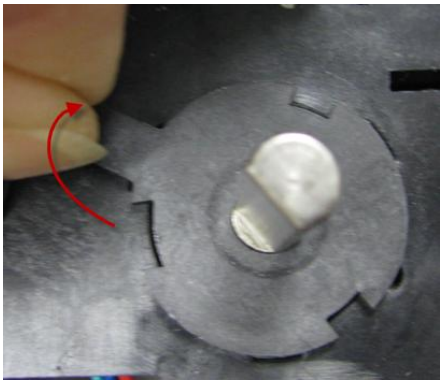
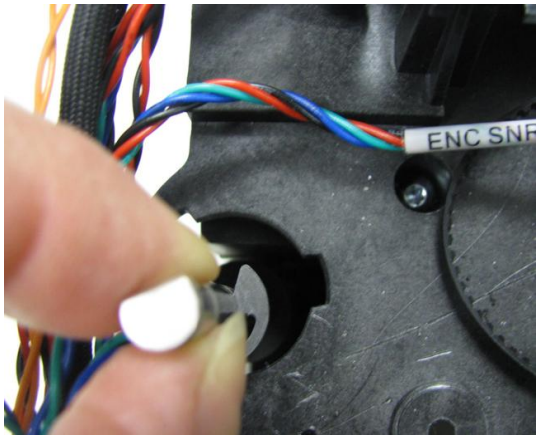
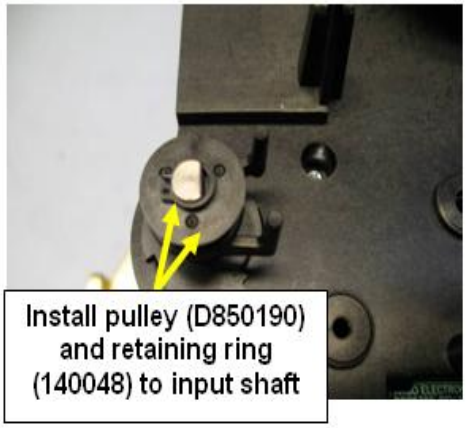
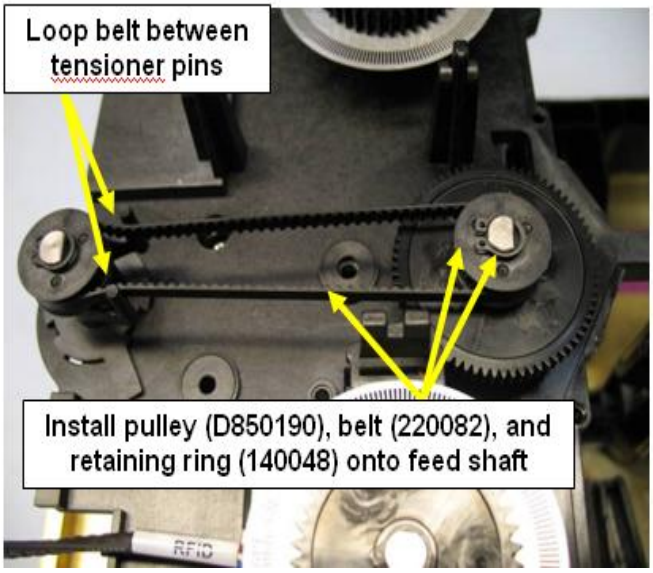
	Replacing the Rollers (continued)
D-1	To replace D920015, Input Feed Roller. Remove the Rewind Motor to access the roller. Remove/Replace the Rewind Motor Assembly
D-2	Remove the retaining ring (140048) 
D-3	Remove the pulley. (D850190) Pull up with the belt attached. Remove the Belt Tensioner (D920168)  TIP: When replacing the roller also replace the pulley (D850190) for best results.

.

Step	Procedure
D-4	Remove the Shaft Bushing. (D900046)  Unlock the shaft bushing (D900046) by turning it counter clock wise. (TIP: Lift UP on the tab to unlock the pin underneath the tab.)
D-5	Remove the Roller (D920015) 
D-6	Replace with the new roller (D920015). Use the E CLIP from the old roller. Make **NOTE:** of how this is placed on the roller.
D-7	Reverse assembly to complete the roller replacement. A new belt (220082) may be replaced if necessary.

.

Step	Procedure
D-8	**TIP:** Orient the flat side of the shaft facing RIGHT on both rollers when replacing the pulley.  
D-9	Shows order of parts when replacing.

.

Remove/Replace the Rewind Motor Assembly RFID Board A000365-01

Encoder Sensor A000126

A000126

A000365-01

Tools needed: T10 Torx screwdriver

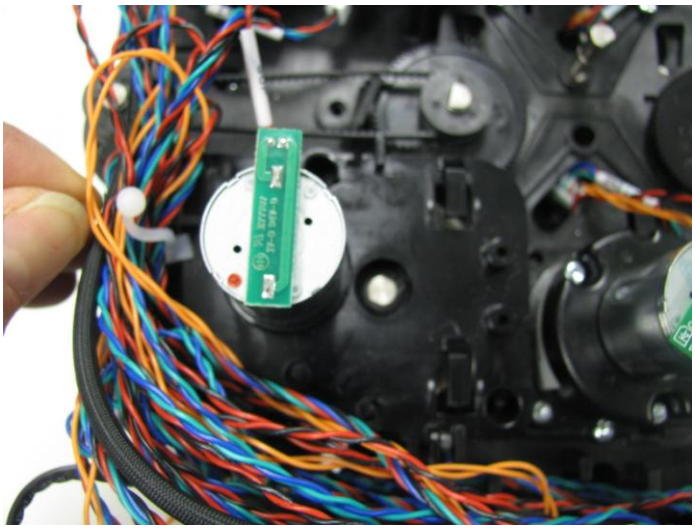
Estimated Repair Time: 30 min

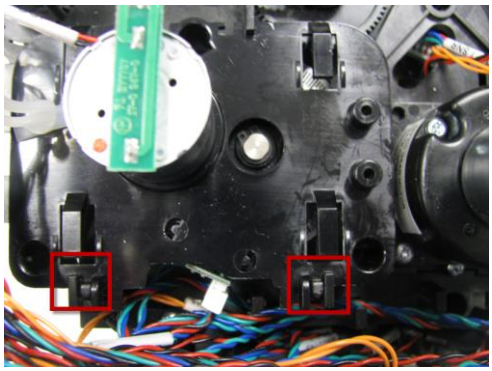
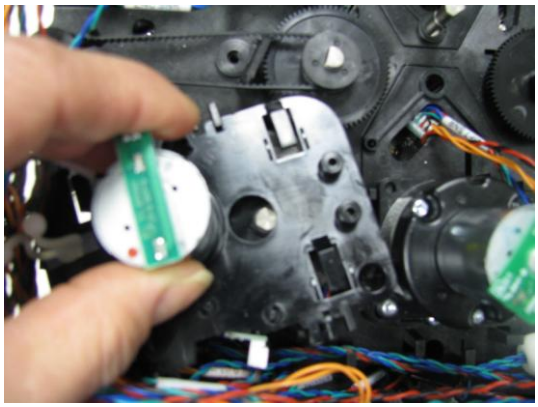
Preparation: Remove the Lamination Module Covers.

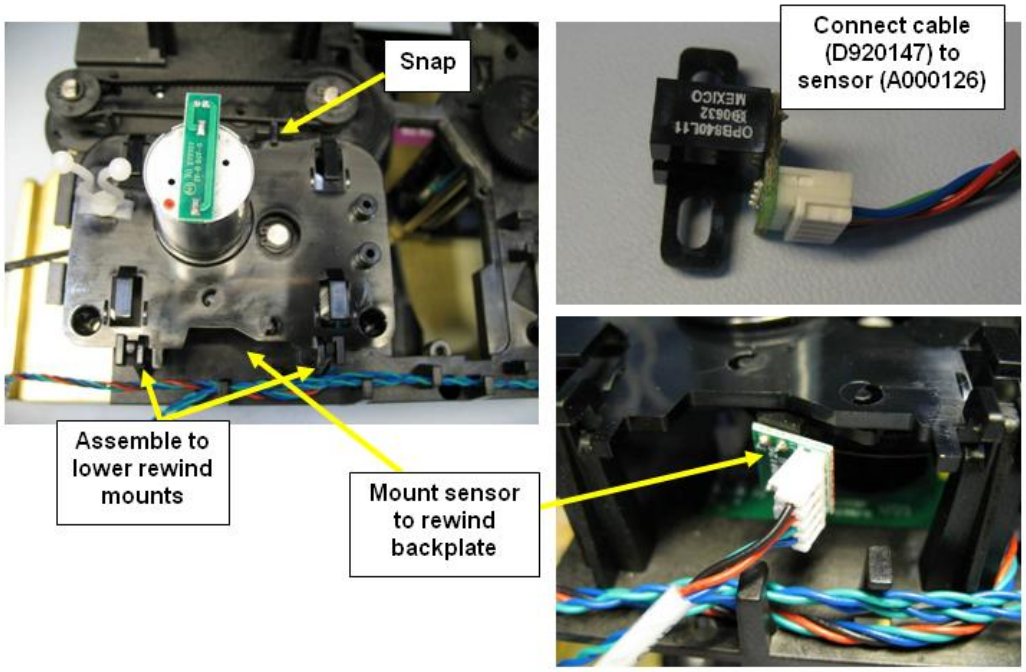
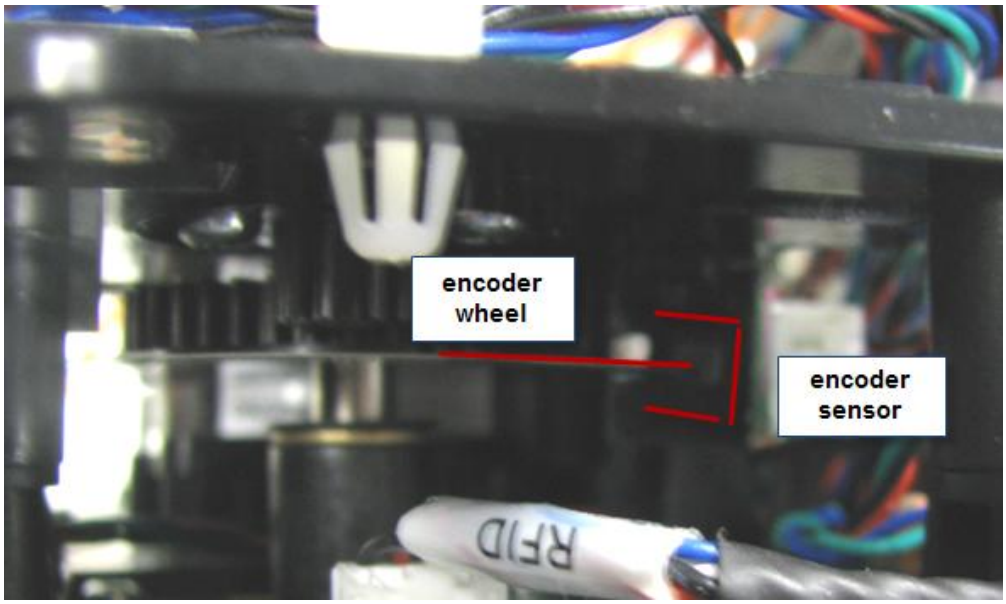
Important: This procedure can only be performed by authorized service personnel.

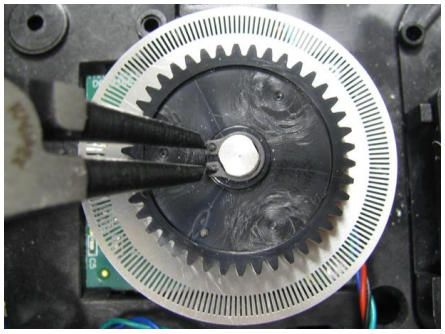
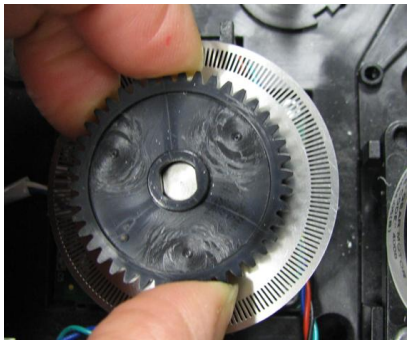
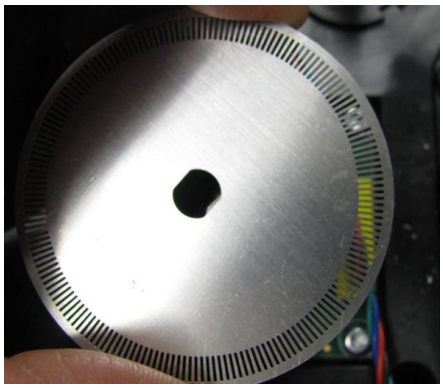
NOTE: The Dual Side Lamination Module uses 2 Rewind Motor Assemblies.

****Picture shown below is the LOWER Rewind Assembly.

Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Unclip the Wire bundle for better access. 

Step	Procedure
3	The Rewind Mount assembly (D900406) is attached at the bottom then snapped at the top. Unsnap the top of the assembly then pivot the assembly to the LEFT to release the encoder sensor from the encoder wheel. This releases the assembly from the frame. **TIP**: When reassembling use your finger to guide the encoder sensor (from underneath) to the proper position. Slide in from the left at an angle then turn to match the snap tabs. **CAUTION:** Take care not to bend the assembly straight up as the encoder wheel may be damaged.   OR The encoder sensor (**A000126)** can be removed first so the encoder wheel does not get damaged. Carefully use a small flat screwdriver to pry the sensor from the frame. Follow direction above. When replacing the sensor, line up the sensor from underneath then snap in place.

Step	Procedure
4	
5	Verify the Encoder Wheel is positioned properly between the Encoder Sensor. 

Step	Procedure
6	Replace the RFID PCB (A000365-01) Remove the Rewind Assembly as described above. Remove the Retaining Ring (140048) Gear (D920170)   Remove the Encoder Wheel (810492) 2 screws hold the PCB (A000365-01)  Slide the RFID PCB to the right. The PCB is held by tab on the left of the frame. Replace with new PCB A000365-01. Reverse Assemble.

Appendix A

Replacing the DTC Printhead

The guide serves to instruct the user about replacing the Printhead. This procedure can only be performed by authorized service personnel.

Caution: Turn OFF the Printer and unplug the power cord from the Printer.

Danger: Wear proper eye protection to perform the procedures in this section.

Reverse the disassembly steps to reassemble the Card Printer. ESD precautions are necessary when handling electronics assemblies.

DTC Printhead procedure

The guide serves to instruct the user about replacing the Printhead. This procedure can only be performed by authorized service personnel.

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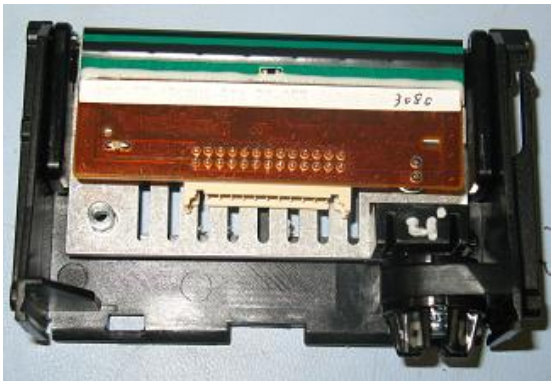
Danger: Wear proper eye protection to perform the procedures in this section.

Reverse the disassembly steps to reassemble the Card Printer. ESD precautions are necessary when handling electronics assemblies.



Tools needed: Flathead screwdriver

Torx Wrench (included in kit)

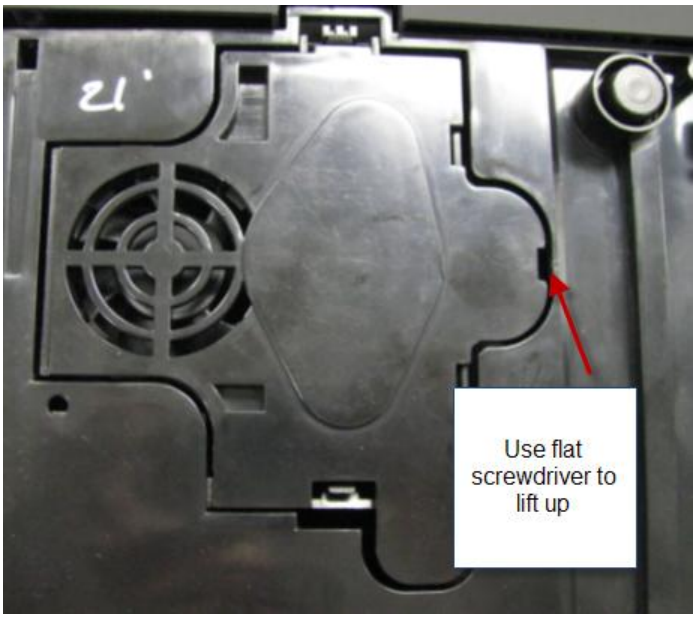
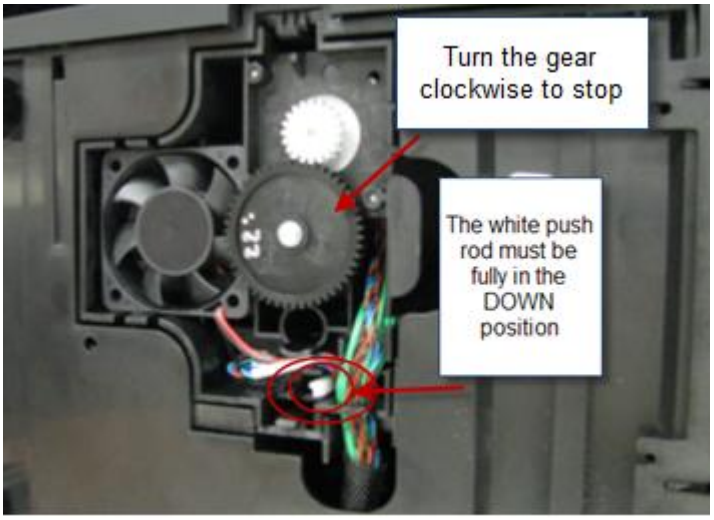
Estimated Repair Time: 20 minutes

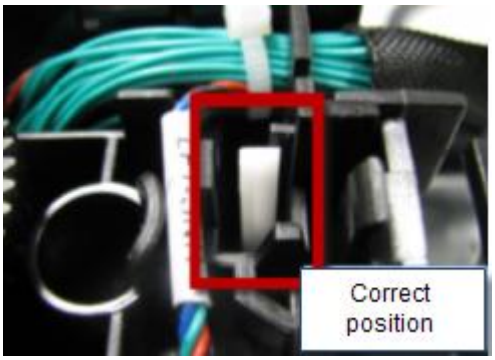
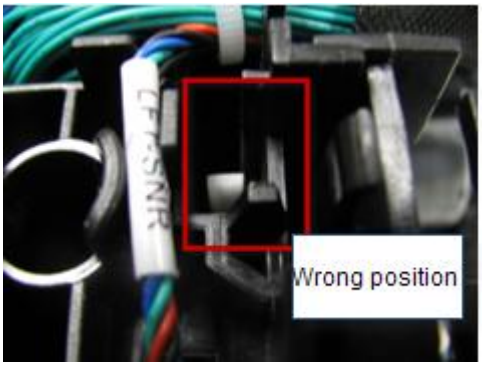
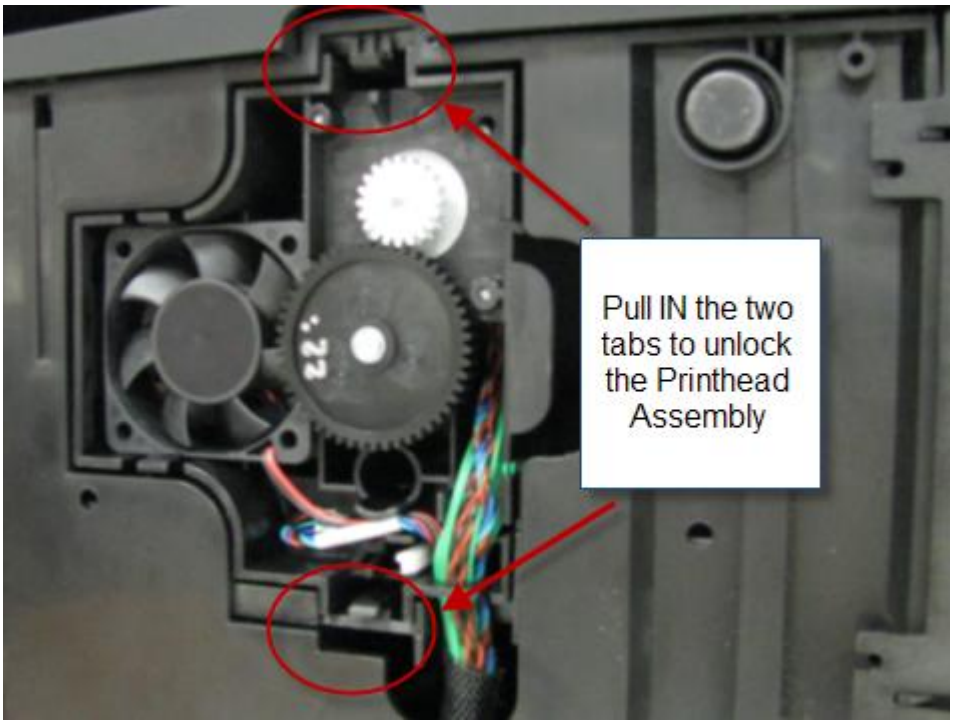
Preparation: Remove Printhead mount

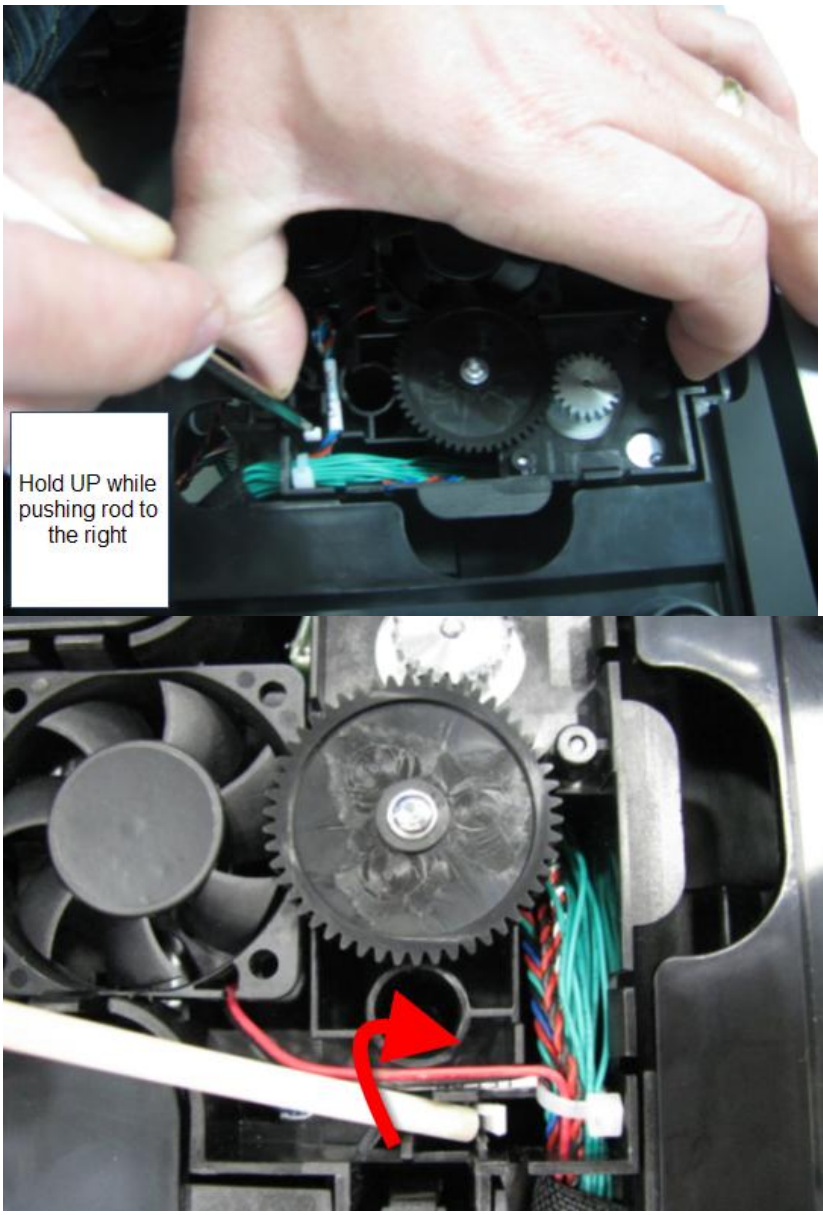
Important: This procedure can only be performed by authorized service personnel.

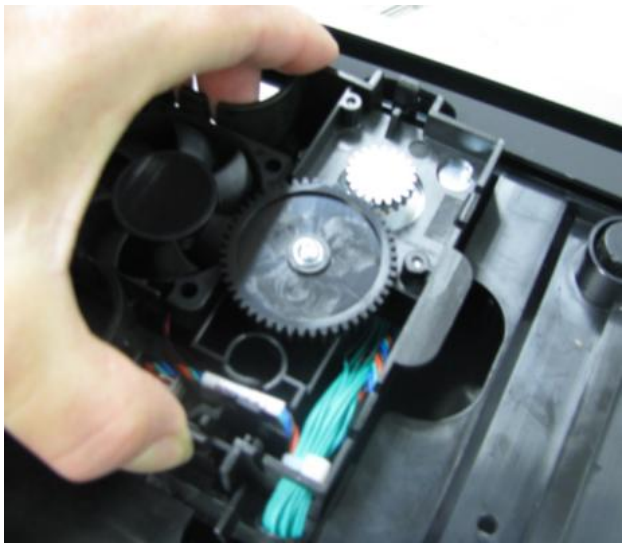
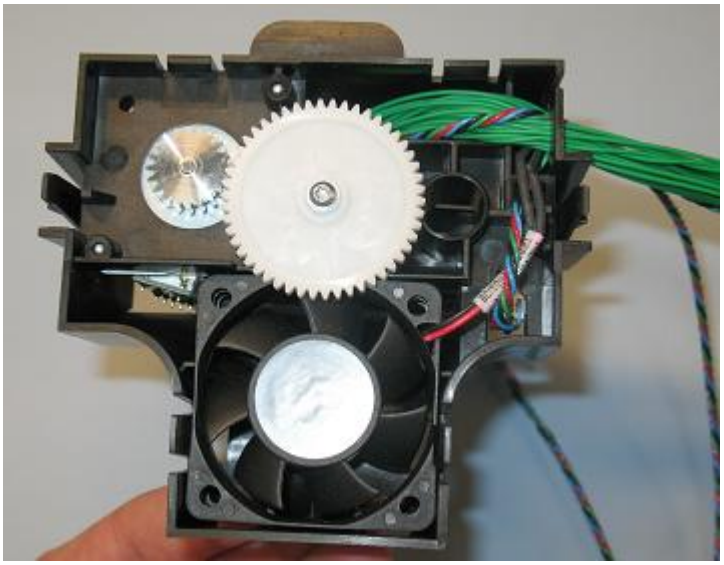
Make **NOTE:** of the resistance value on the new printhead; verify this value in the Advanced Settings driver option. Refer to the User Guide for more information.

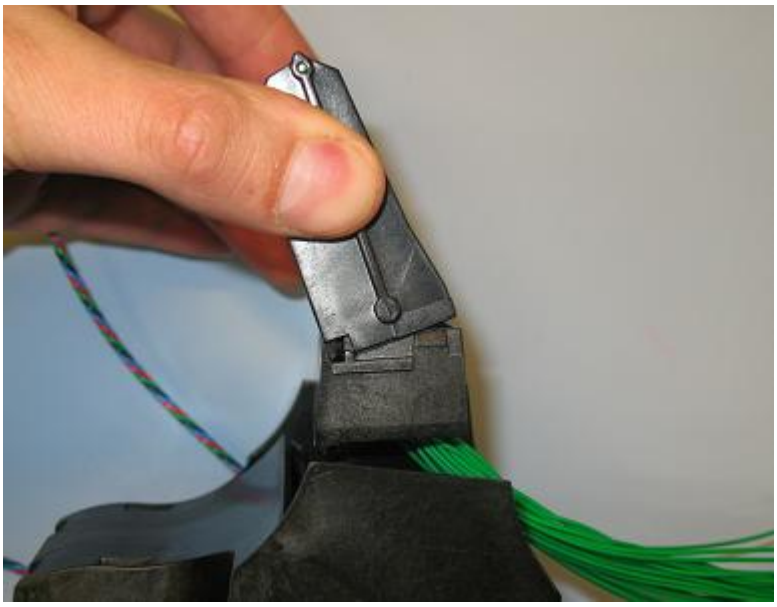
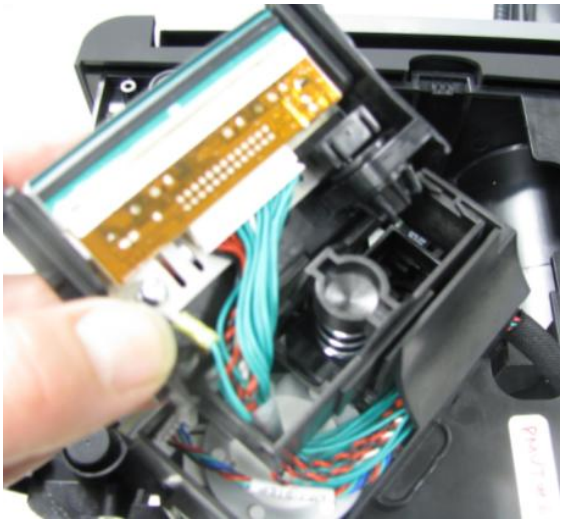
Step	Procedure
1	Caution: Turn OFF the Printer and unplug the power cord from the Printer.
2	Turn the printer over to access the Headlift cover.

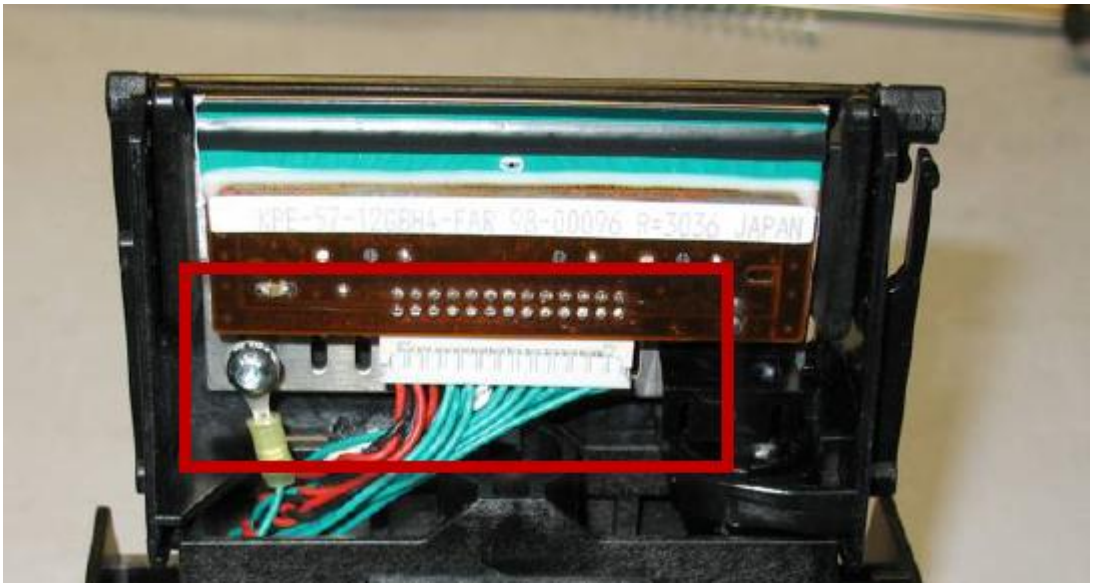
Step	Procedure
3	Use a flathead screwdriver to lift the cover from the frame. 
4	VERY IMPORTANT STEP Turn the gear clockwise until the Push Rod is in the **DOWN** position. (in relation to the printer base) 

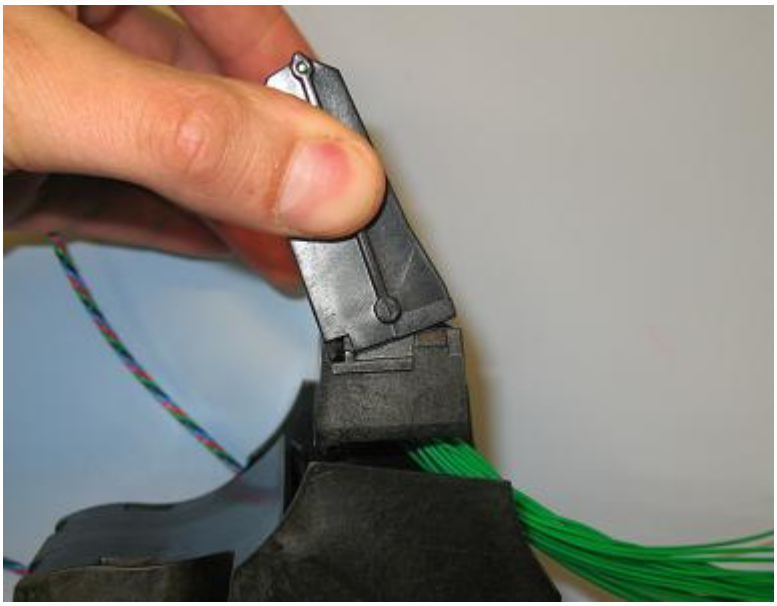
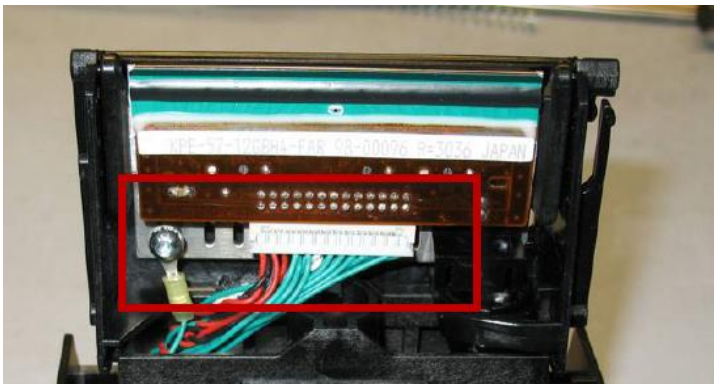
Step	Procedure
5	 correct position  wrong position
6	Pull the 2 tabs IN and pull UP to ***loosen*** the Printhead assembly. Hold UP until you can push the white rod to the right. Do not pull up until the push rod has been moved. See step 6 below. 

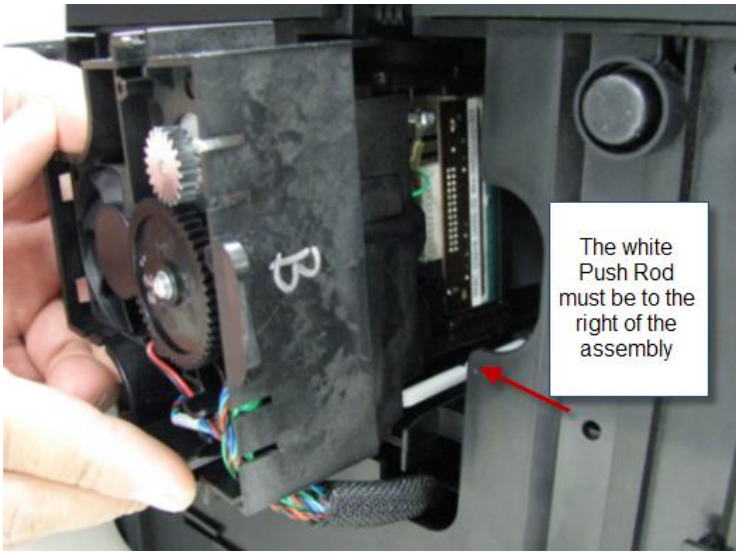
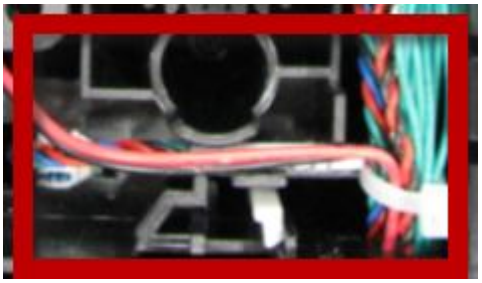
Step	Procedure
7	Unlock the push-rod by moving it from the left to the right side of the tab. 

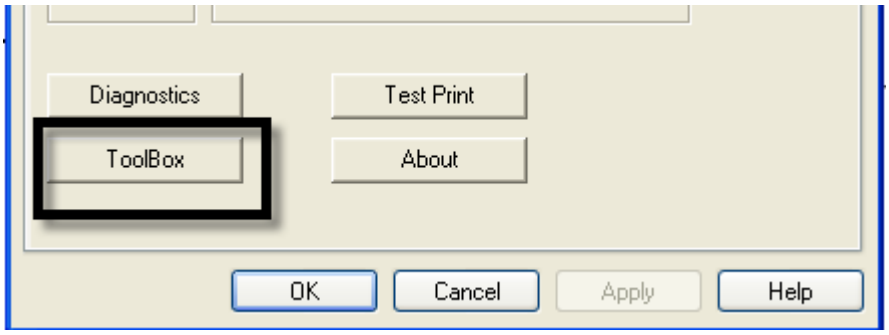
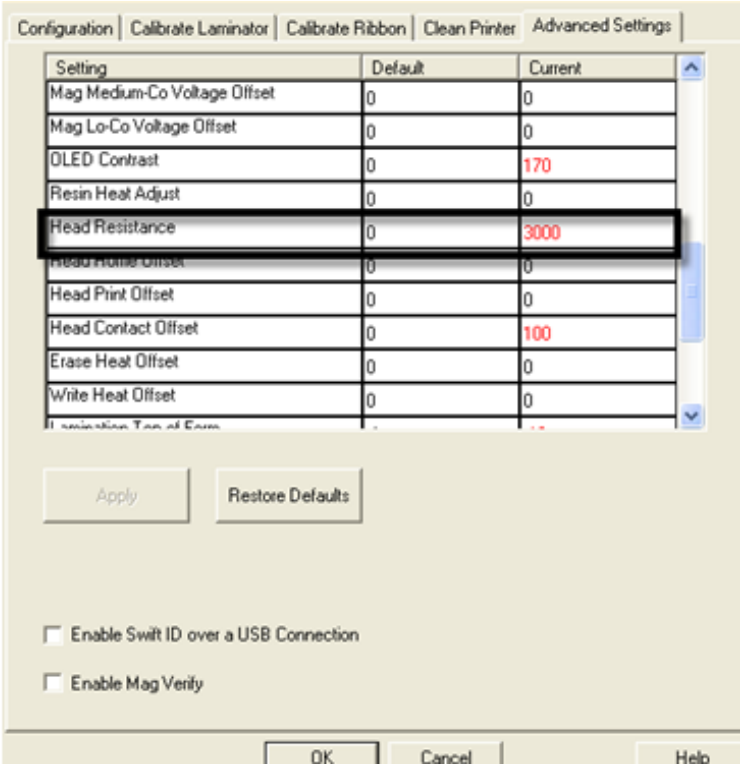
Step	Procedure
8	The printhead assembly can now be pulled up and out from the frame. 
9	The back side of Printhead assembly shown has been removed from the printer. 

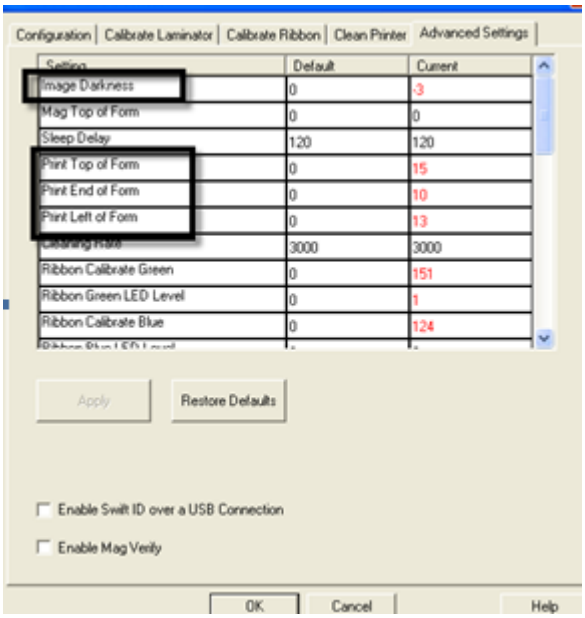
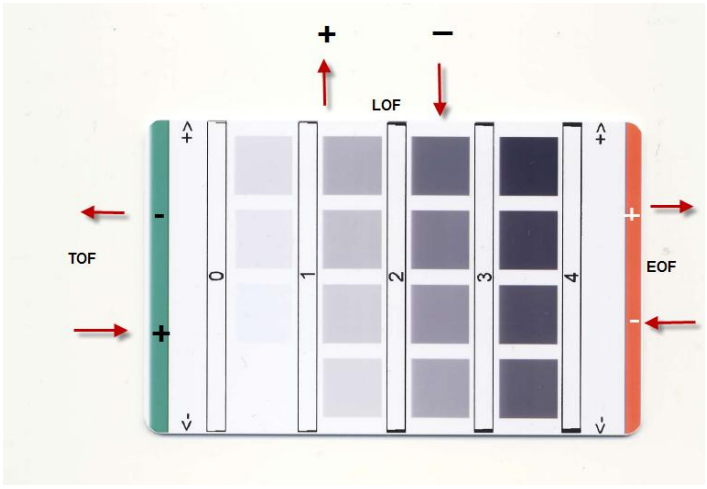
Step	Procedure
10	Grasp the printhead mount and rotate to release the printhead from the main assembly.  

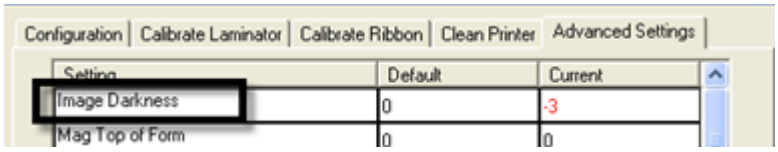
Step	Procedure
11	Remove the cable (D930602). Be careful not to damage the pins. Remove the Torx screw (F000170) and release the ground cable. Leave the wires in the main assembly. 
12	Before installing the new Printhead make **NOTE:** of the **R=xxxx** value. This number will be used after the Printhead is installed and ready to make the final adjustment. See Advanced Adjustments below.

Step	Procedure
13	Replace with the new printhead. Install the printhead assembly holes into the tabs and tilt to snap the printhead assembly into place. Verify the printhead is secure in the mount. 
14	Reconnect the cable and ground cable. 

Step	Procedure
15	VERY IMPORTANT STEP Reinstall the printhead mount assembly into the printer. Line up the Printhead assembly. **IMPORTANT NOTE:** Verify the white Push Rod is to the right of the assembly before reinserting.  Verify the push-rod is in the correct position. It will rest to the right side of the tab. 
16	**CAREFULLY** re-insert the completed printhead assembly. Do not scratch the printhead surface.
17	Replace the Headlift cover by snapping back into place.
18	Procedure is complete.

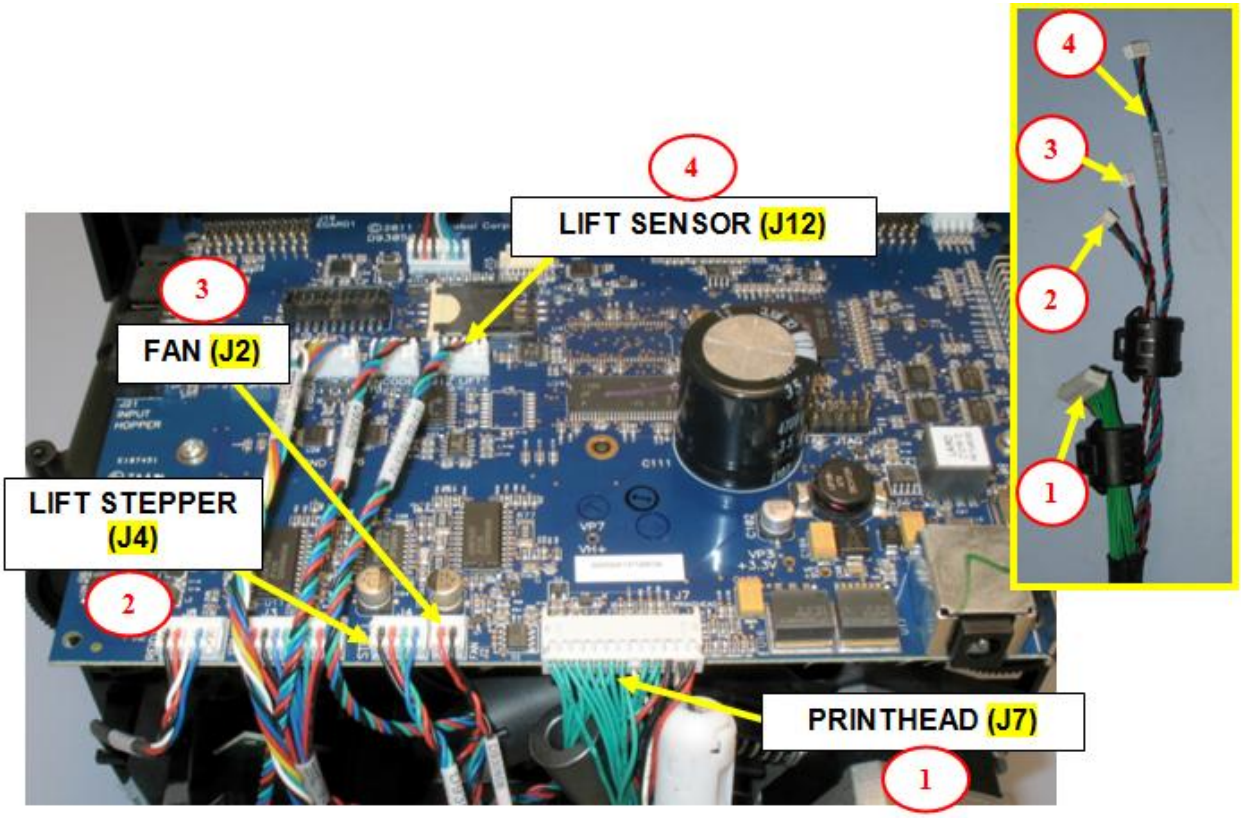
	Advanced Adjustment procedure
1	Open the Toolbox to access Advanced Settings tab from the printer driver. 
2	Use the R=xxxx number from step 11. Add this number to the CURRENT box and click OK to save OR proceed to the TOF, EOF or LOF adjustments below. 

Step	Procedure
3	Adjust the Image Darkness, Print Top of Form (TOF), Print End of Form (EOF), Print Left of Form (LOF) as needed by increasing or decreasing the CURRENT setting numbers. **NOTE:** Refer to the Advances Settings section in the User Guide.. 
4	Print the ALIGNMENT test card from the Printer display TOOLS to fine tune the image placement. Refer to the User Guide for using TOOLS. 

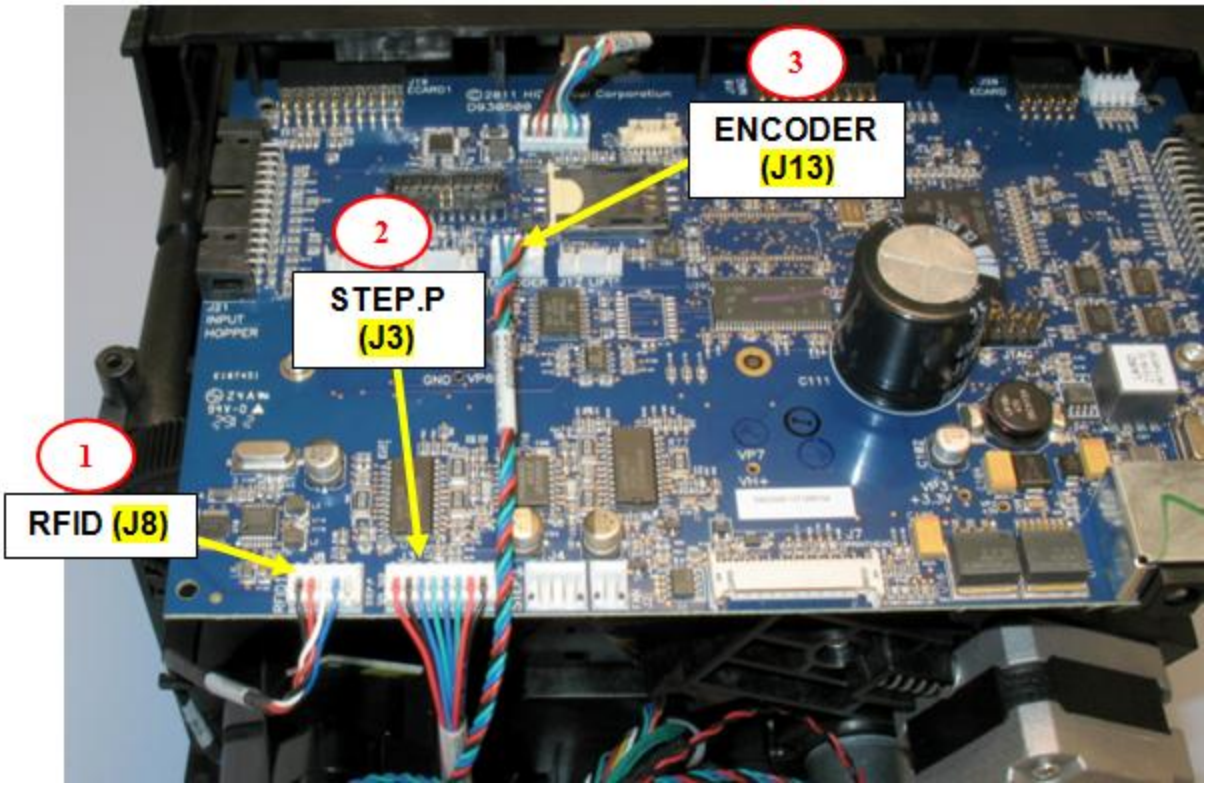
Step	Procedure
5	To adjust IMAGE DARKNESS: Increase the number to darken the image density or decrease the number to lighten the image density. 
6	Procedure is now complete.

Appendix B

Printer Mainboard connections



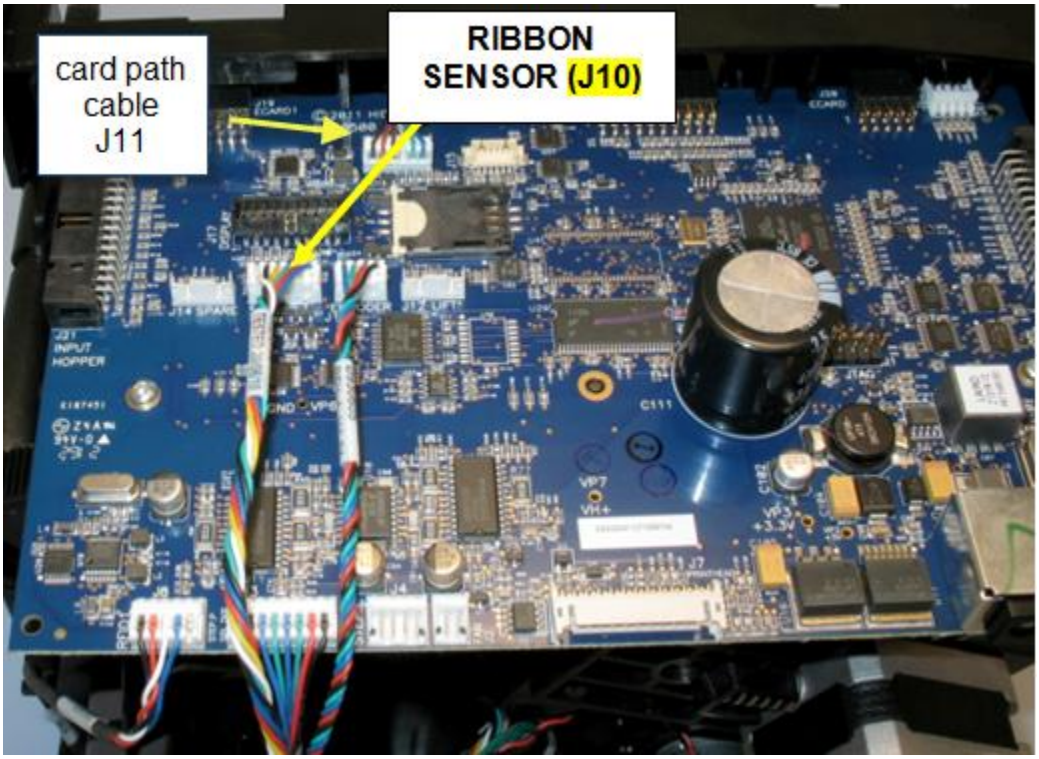
J2-J4-J7-J12 Printhead Harness Cable (D930616) Printhead, Lift Stepper & Sensor, Fan



J3 Motor Harness Cable (D930600) Stepper Motor, Ribbon Supply, Ribbon Take-up

J8 RFID Cable (D930603)

J13 Encoder Cable (D930605)



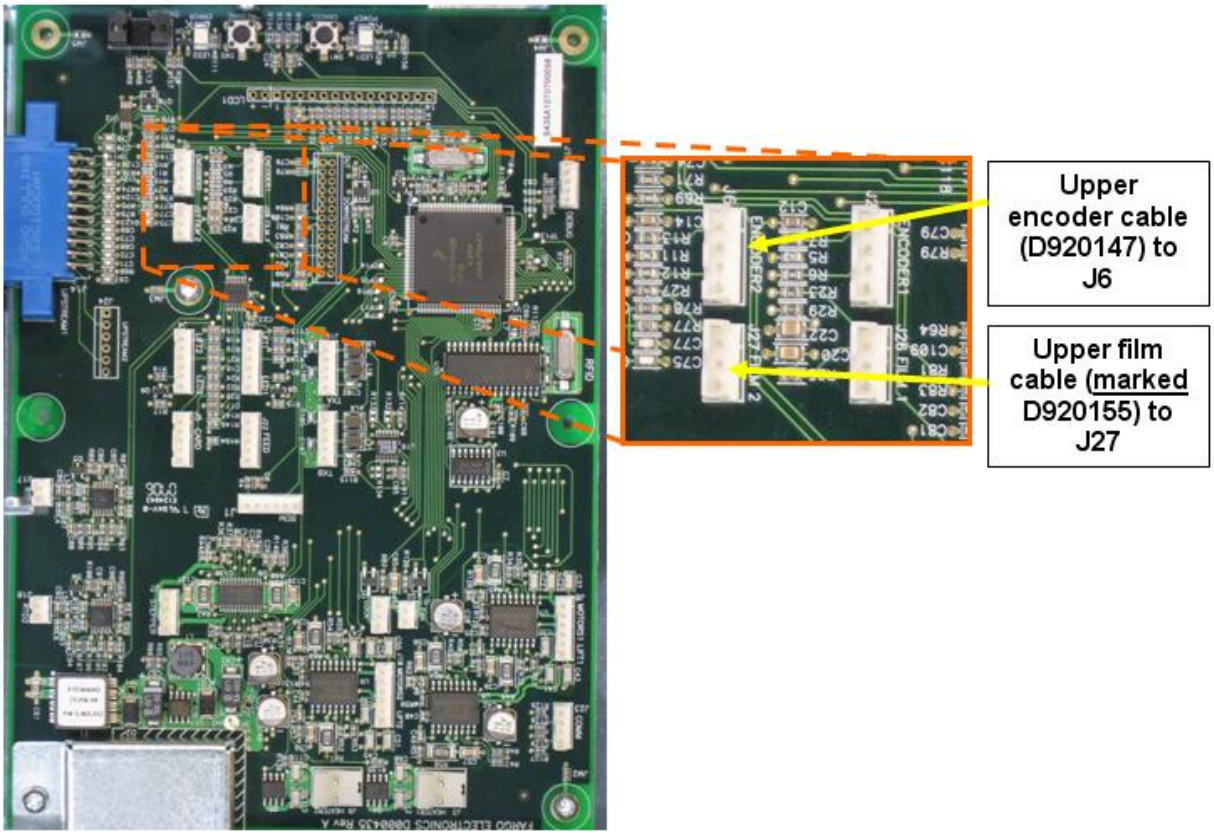
J10 (D930608) Ribbon Sensor Cable

J11 (D930613) Card Path Cable

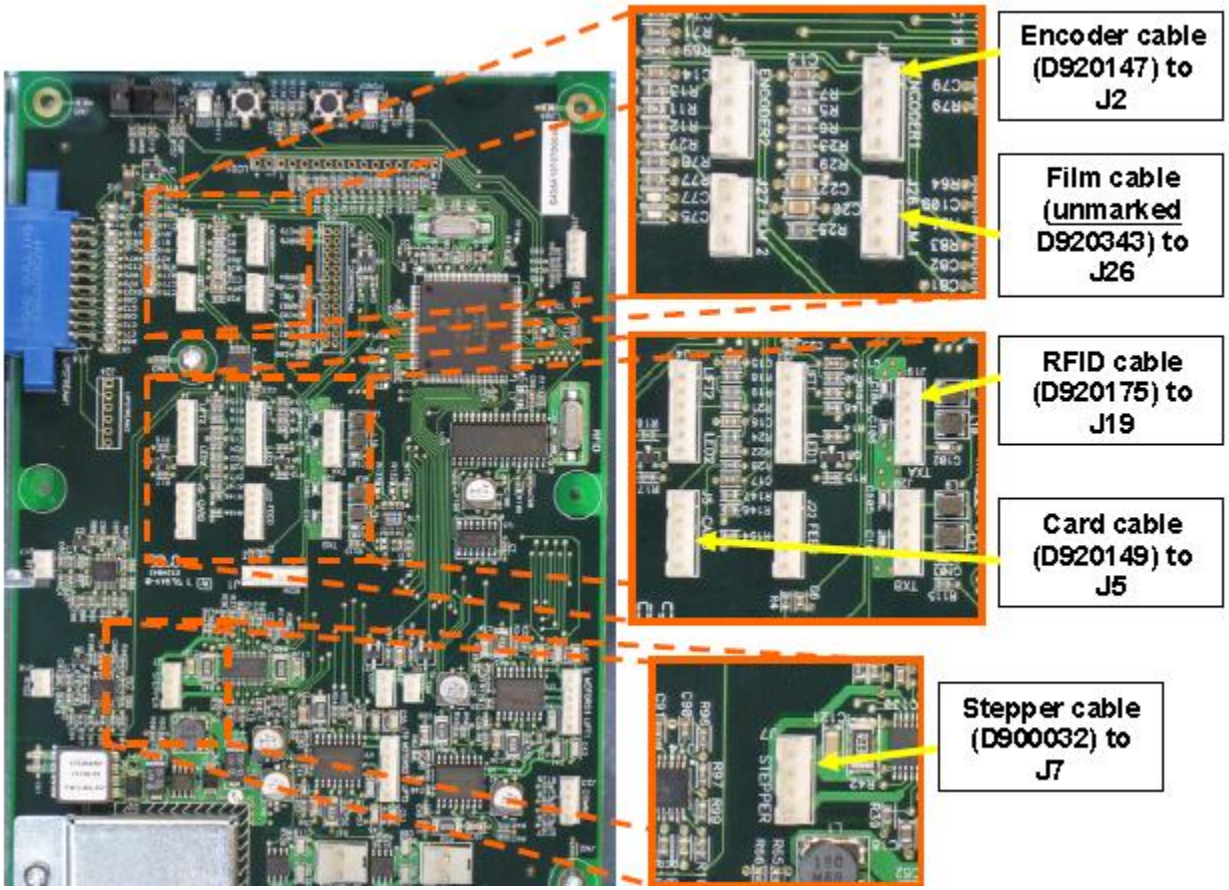
Appendix C

Lamination Module Mainboard connections

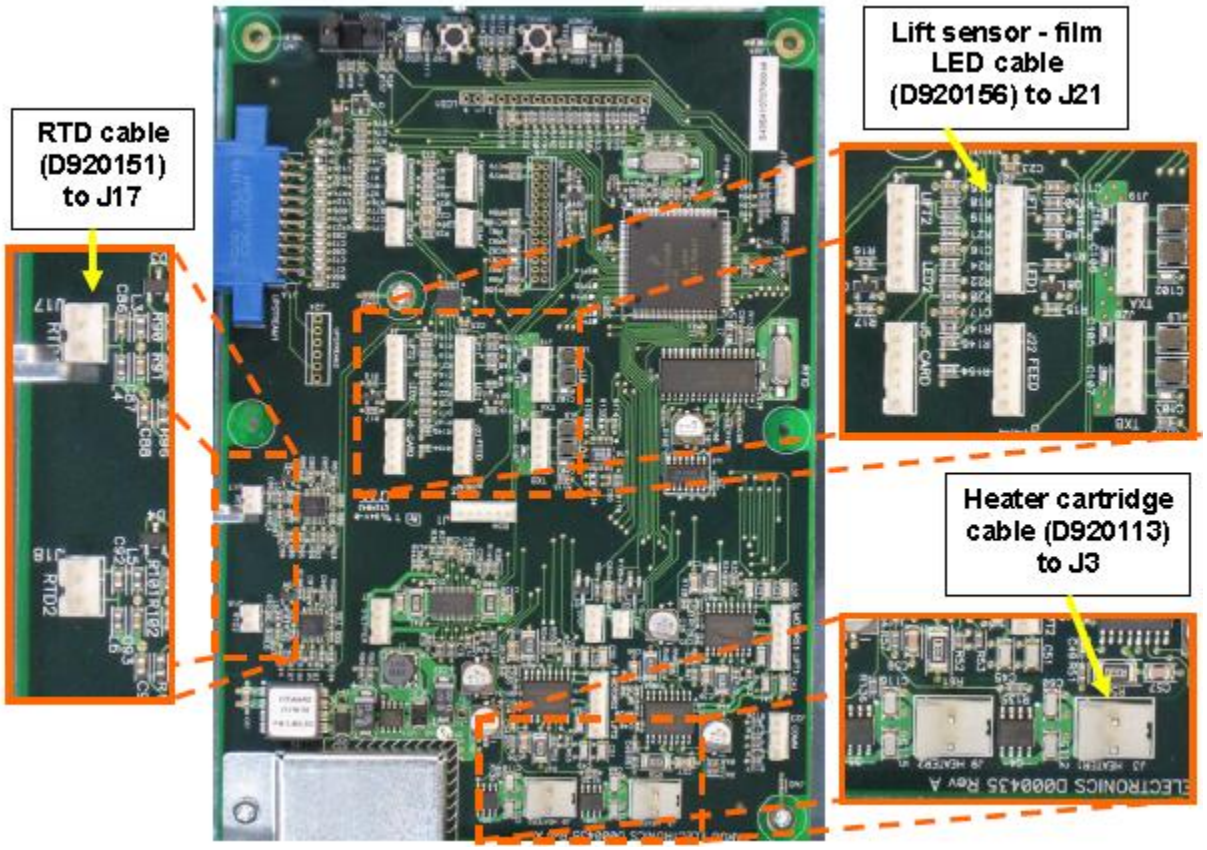
Upper Sensing Cables



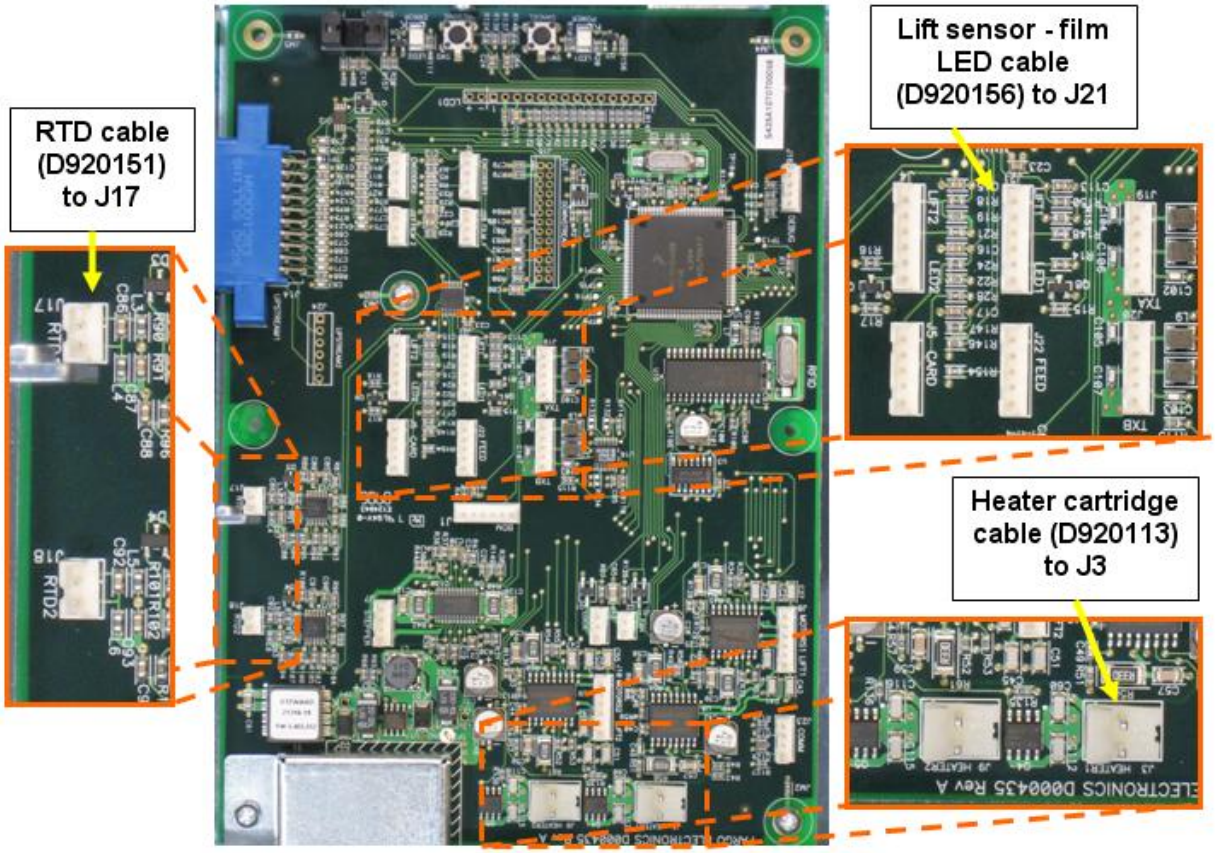
Feed & Lower Sensing Cables


Encoder cable (D920147) to J2
Film cable (unmarked D920343) to J26
RFID cable (D920175) to J19
Card cable (D920149) to J5
Stepper cable (D900032) to J7

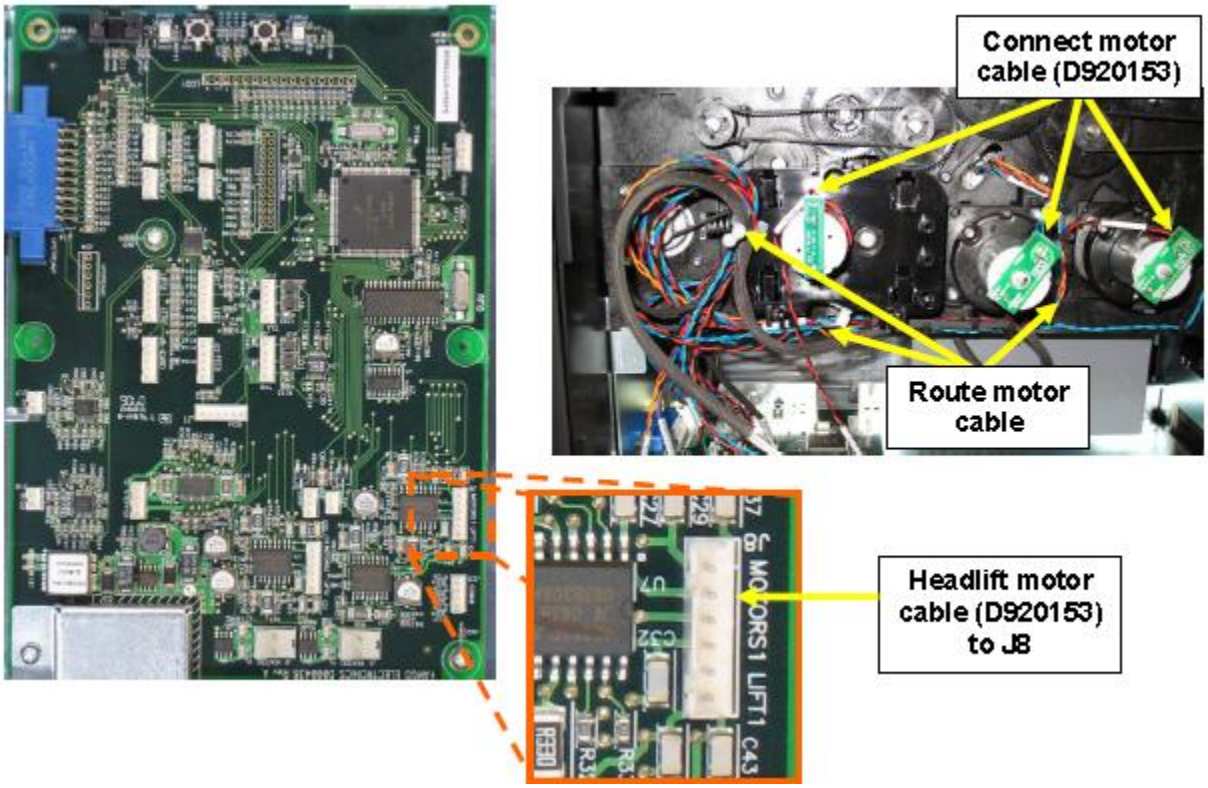
Upper Lam Head Cables



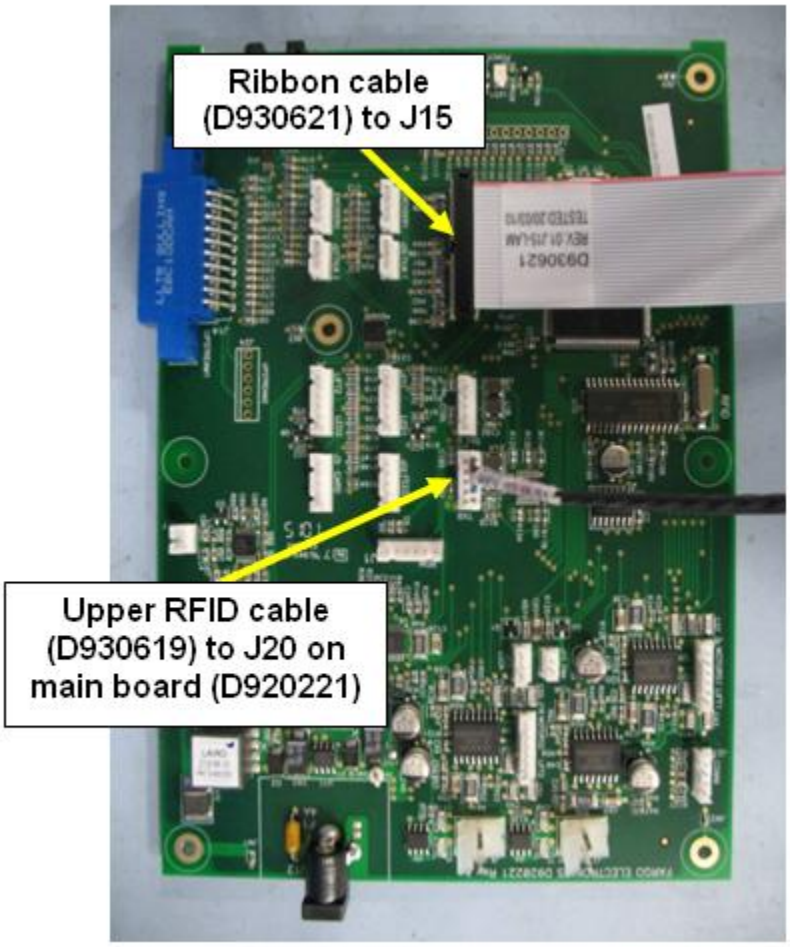
Lower Lam Head Cables



Lower Motor Cables



Upper RFID and Ribbon Cable



Appendix D

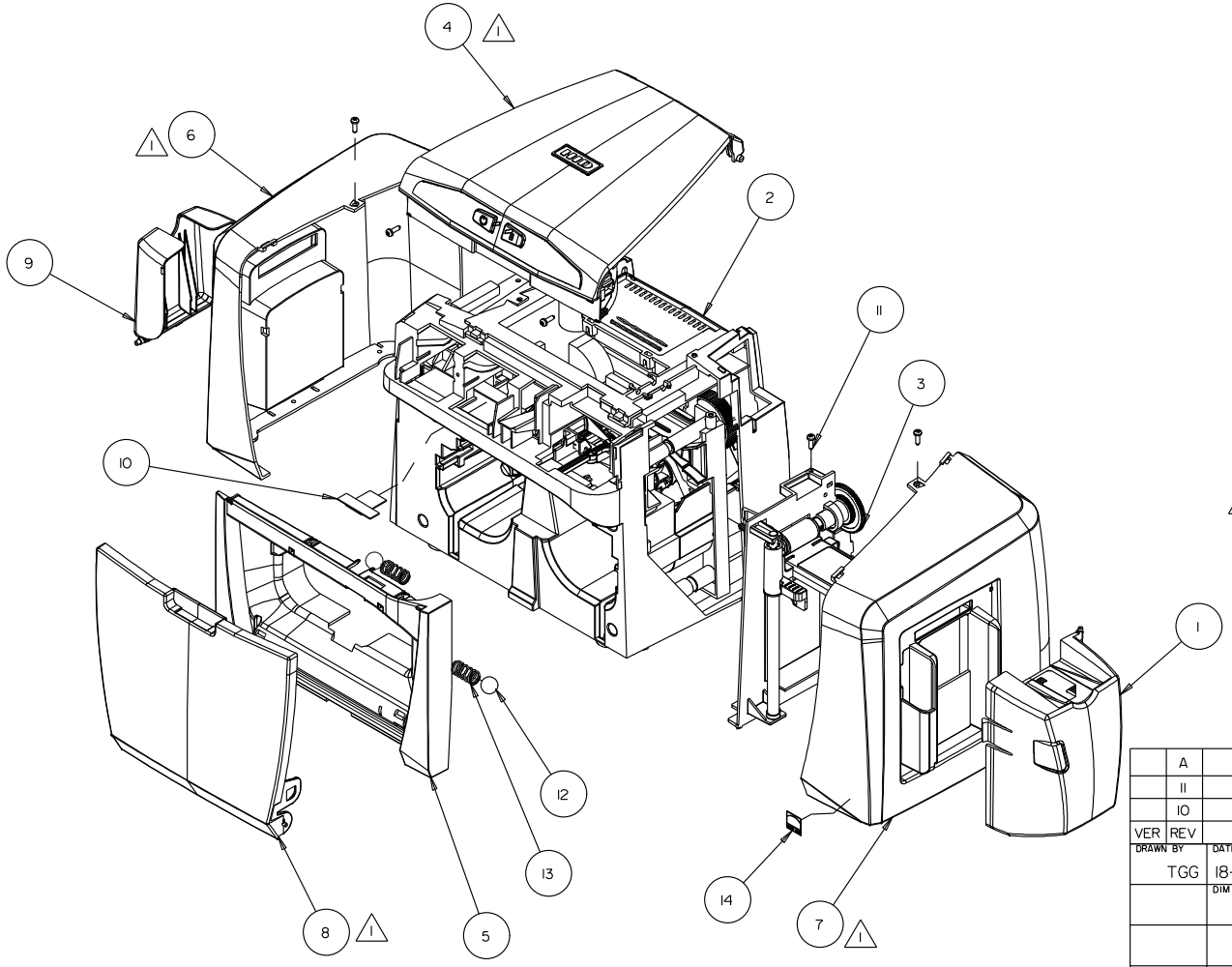
Engineering Drawings

FARGO

RELEASED

NOT PRODUCTION VALID W/O STAMP ABOVE

1 PART NUMBER	DESCRIPTION	D930034-XX	D930263-XX	D930264-XX	D930265-XX	REVISION
MDP-00058	ASY-PRINTER DTCI250E	-02	-03	-03	-05	A
MDP-00092	ASY-PRINTER DTCI000ME	-02	-02	-02	-04	A



ITEM	QTY	ITEM NUMBER	TYPE	DESCRIPTION
1	1	D900067-01	PART	DOOR - INPUT
2	1	D930002	ASSEMBLY	ASY COMMON PRINT ENGINE
3	1	D930030	ASSEMBLY	ASY-INPUT-MECH-100 CARD
4	1	D930034 -XX	ASSEMBLY	ASY-COVER TOP
5	1	D930262	PART	COVER-FRONT
6	1	D930263 -XX	PART	COVER_LEFT
7	1	D930264 -XX	PART	COVER_RIGHT
8	1	D930265 -XX	PART	COVER-FRONT DOOR
9	1	D930269-01	PART	OUTPUT BIN
10	1	D930370	ASSEMBLY	ASY TAB CARD PATH INSERT
11	5	F000178	PART	SCREW-#4-20X.375_TPH_ZP_PLAS
12	2	F000503	PART	BALL-STEEL
13	2	F000504	PART	SPRING-COMP .420 X .875 X .035
14	1	L001535	PART	LABEL-ENERGY STAR

CABLES ARE NOT SHOWN IN DRAWING.

NOTES:

1 TABLE TO IDENTIFY PART NUMBER DIFFERENCES BETWEEN THE ASSEMBLIES.

VER	REV	RECORD	ECO#	DATE	DRA/ENG
	A	INITIAL RELEASE	EMN-00971	23-AUG-13	TGG/TGG
	II	BOM CORRECTIONS	EMN-00482	10-AUG-13	TGG/TGG
	10	PROTO-TYPE RELEASE	EMN-00202	17-JAN-13	TGG/TGG

DRAWN BY	DATE
TGG	18-Mar-13
	DIM UNITS: inch
SCALE: 0.300	SIZE: B

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DESCRIPTION: ASY-PRINTER DTCIXXX 1/1

ASSY DWG

PROJECT	ASSY PART NUMBER	ITEM NUMBER
ONYX	ASD-00283	ASD-00283

ENGINEERING USE ONLY

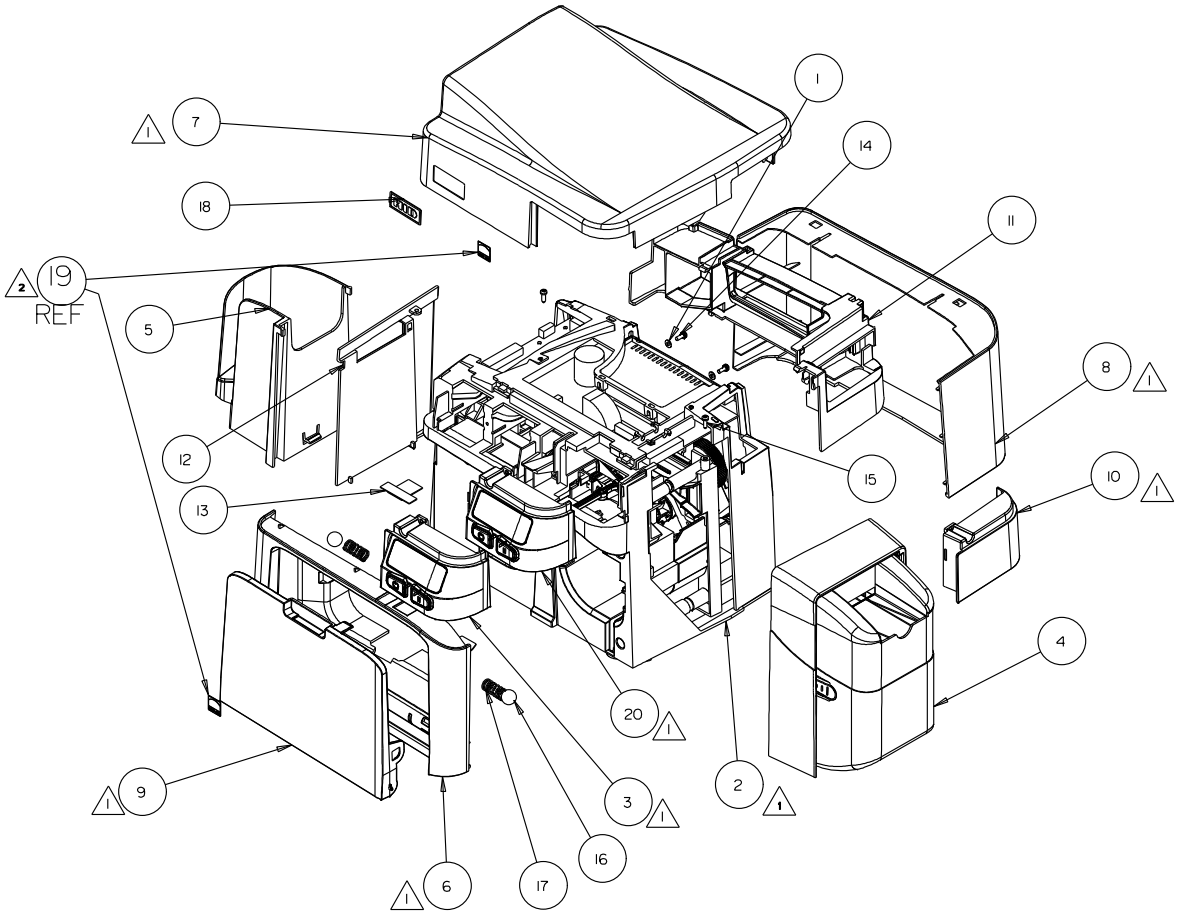
DRAWING FILE	ENGINEERING MODEL NAME	MODEL TYPE
ASD-00283	ASD-00283	ASSEM

FARGO

RELEASED

NOT PRODUCTION VALID W/O STAMP ABOVE

1 PART NUMBER	DESCRIPTION	D930180-XX	D930181-XX	D930182-XX	D930183-XX	D930189-XX	D930018	MDP-00093	REVISION
D930000	ASY-PRINTER DTC4000	-01	-01	-01	-02	-01	Y	N	D
MDP-00097	ASY-PRINTER DTC4250E	-01	-01	-01	-04	-01	N	Y	A



ITEM	QTY	ITEM NUMBER	TYPE	DESCRIPTION
1	2	140040	PART	WASHER 3MM FLAT
2	1	D930002	ASSEMBLY	ASY COMMON PRINT ENGINE
3	1	D930018	ASSEMBLY	ASY-COVER-LCD/BUTTON DISPLAY
4	1	D930022	ASSEMBLY	ASY-INPUT 100 CARD
5	1	D930033	ASSEMBLY	ASY OUTPUT BIN
6	1	D930180 -XX	PART	COVER-FRONT
7	1	D930181 -XX	PART	COVER-TOP
8	1	D930182 -XX	PART	COVER-BACK
9	1	D930183 -XX	PART	COVER-FRONT DOOR
10	1	D930189 -XX	PART	COVER-DISPLAY
11	1	D930280-01	PART	COVER-BACK-TOP
12	1	D930281-01	PART	COVER-OUTPUT
13	1	D930370	ASSEMBLY	ASY TAB CARD PATH INSERT
14	2	F000171	PART	SCREW-M3X8_TPH_ZP_SEM
15	2	F000178	PART	SCREW-#4-20X.375_TPH_ZP_PLAS
16	2	F000503	PART	BALL-STEEL
17	2	F000512	PART	SPRING-COMP-.437 X .875 X .032
18	1	L001393	PART	BADGE - HID
19	1	L001535	PART	LABEL-ENERGY STAR
20	1	MDP-00093	ASSEMBLY	ASY COVER LCD/BUTTON DISPLAY

CABLE ASSEMBLIES NOT SHOWN FOR CLARITY

NOTES:

1. THE TABLE IS TO IDENTIFY DASH NUMBERS FOR PART NUMBER DIFFERENCES.
2. FOR LOCATION OF L001535 LABEL, SEE MANUFACTURING PROCESS INSTRUCTION.

	A	INITIAL RELEASE	EMN-01055	28-Aug-13	TGG/TGG
VER	REV	RECORD	ECO#	DATE	DRA/ENG

DRAWN BY: TGG | DATE: 28-Aug-13 | DIM UNITS: inch | SCALE: 0.250 | SIZE: B

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DESCRIPTION: ASY-PRINTER DTC4XXX | 1 / 1

ASSY DWG | PROJECT: ONYX | ASSY PART NUMBER: ASD-00294 | ITEM NUMBER: ASD-00294

ENGINEERING USE ONLY

DRAWING FILE	ENGINEERING MODEL NAME	MODEL TYPE
ASD-00294	ASD-00294	ASSEM

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RELEASED

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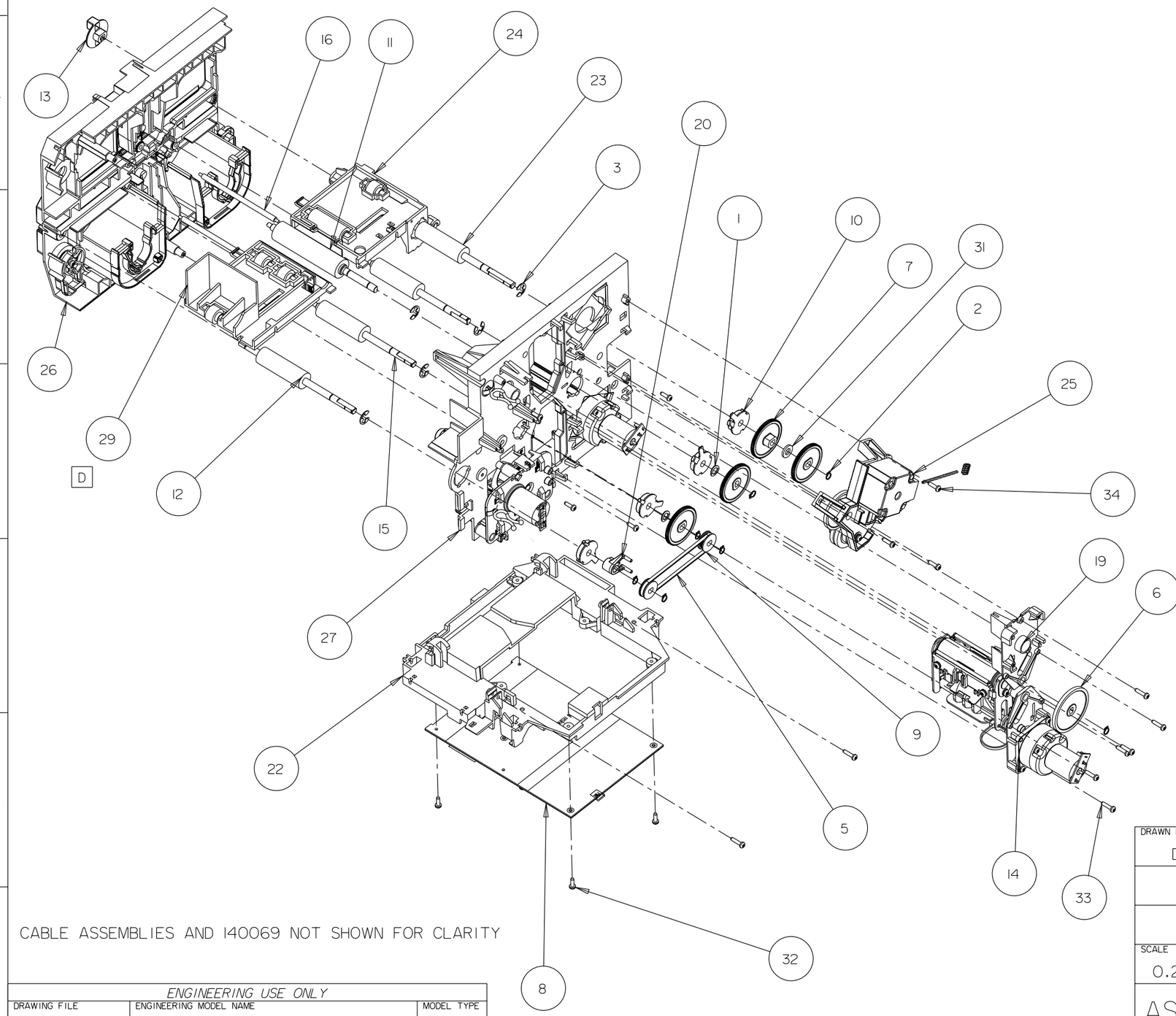

CABLE ASSEMBLIES AND 140069 NOT SHOWN FOR CLARITY

ITEM	QTY	ITEM NUMBER	TYPE	DESCRIPTION
1	2	130951	PART	WASHER-SPRING.269ID.423OD.006THK
2	7	140048	PART	RETAINING RING-EXT C .25 IN SHFT
3	5	140062	PART	RETAINING RING-EXT E .250 IN SHFT
4	1	140069	PART	TIE WRAP 4.00"L X 0.10"W
5	1	220082	PART	BELT-105 GRV 125 W MXL
6	1	810265	PART	GEAR-PLATEN CARD DRIVE
7	4	810266	PART	GEAR-CARD TRANSPORT DRIVE
8	1	A92022I-10	ASSEMBLY	ASY MAIN BOARD 4500 LAM
9	2	D850190	PART	PULLEY-MAIN
10	4	D900046	PART	SHAFT BUSHING
11	1	D920014	PART	ROLLER PLATEN
12	1	D920015	PART	ROLLER-INPUT
13	1	D920016	PART	KNOB- GEAR TRAIN LAM
14	1	D920023	ASSEMBLY	ASY LAM HEAD BOTTOM
15	2	D920119-01	PART	ROLLER- FEED HIGH COF
16	2	D920137	PART	SHAFT- LAM PEEL
17	1	D920147	ASSEMBLY	ASY-CBL-ENC-SNR
18	1	D920153	ASSEMBLY	ASY-CBL-HEADLIFT MOTORS
19	1	D920163	PART	BRACKET-HEADLIFT MOTOR-LAM
20	1	D920168	PART	TENSIONER-BELT
21	1	D920175	ASSEMBLY	ASY-CBL-RFID
22	1	D920212	PART	BRACKET-LAM PRINT ATTACH
23	1	D920218	PART	ROLLER-INPUT-FLIPSIDE
24	1	D930411-01	ASSEMBLY	ASY - CENTERPLATE EXIT LI
25	1	D930413	ASSEMBLY	ASY - STEPPER DRIVE LAM
26	1	D930414-01	ASSEMBLY	ASY - FRONT SIDEPLATE LI
27	1	D930415-01	ASSEMBLY	ASY- REAR SIDEPLATE LI
28	1	D930621	ASSEMBLY	ASY CBL RBN FLIP LAM
29	1	D940305	ASSEMBLY	ASY - CENTERPLATE INPUT
30	1	E000508	PART	FERRITE-SNAP ON
31	1	F000156	PART	SPACER-NYLON .257 X .500 X .062
32	8	F000178	PART	SCREW-#4-20X.375_TPH_ZP_PLAS
33	8	F000182	PART	SCREW-#4-20X.500_TPH_ZP_PLAS
34	3	F000463	PART	SCREW-4-20X438 TPH ZP PLAS

VER	REV	RECORD	ECO#	DATE	DRA/ENG
	D	D930410 REPLACED BY D940305	CI9506	29-DEC-11	DBC/PGU
	C	REMOVED A92022I, ADDED A92022I-10	CI8345	04-NOV-10	DBC/JLS
	B	ADDED (1) F000182, ADDED (1) 140069	CI8290	21-OCT-10	DBC/JLS

DRAWN BY	DATE
DBC	02-Feb-10
	DIM UNITS: inch
SCALE: 0.250	SIZE: B

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DESCRIPTION: ASY LAM LI 1/1

ASSY DWG

PROJECT

ASSY PART NUMBER: D930400-01

ITEM NUMBER: D930400-01

ENGINEERING USE ONLY

DRAWING FILE	ENGINEERING MODEL NAME	MODEL TYPE
D930400-01	D930400-01	ASSEM

FARGO

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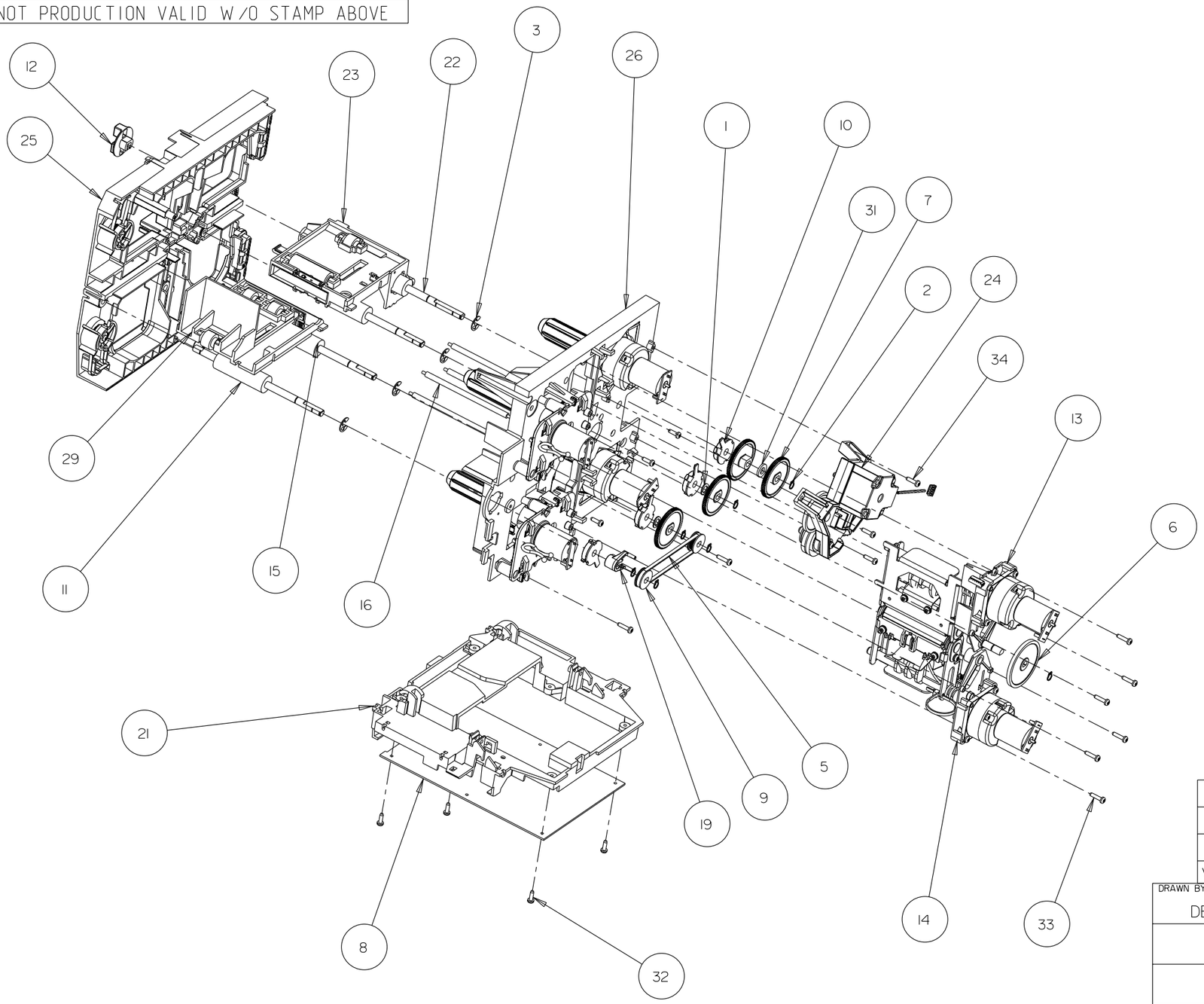
NOT PRODUCTION VALID W/O STAMP ABOVE

CABLE ASSEMBLIES AND 140069 NOT SHOWN FOR CLARITY



ITEM	QTY	ITEM NUMBER	TYPE	DESCRIPTION
1	2	130951	PART	WASHER-SPRING.269ID.423OD.006THK
2	7	140048	PART	RETAINING RING-EXT C .25 IN SHFT
3	4	140062	PART	RETAINING RING-EXT E .250 IN SHFT
4	1	140069	PART	TIE WRAP 4.00"L X 0.10"W
5	1	220082	PART	BELT-105 GRV 125 W MXL
6	1	810265	PART	GEAR-PLATEN CARD DRIVE
7	4	810266	PART	GEAR-CARD TRANSPORT DRIVE
8	1	A92022I-10	ASSEMBLY	ASY MAIN BOARD 4500 LAM
9	2	D850190	PART	PULLEY-MAIN
10	4	D900046	PART	SHAFT BUSHING
11	1	D920015	PART	ROLLER-INPUT
12	1	D920016	PART	KNOB- GEAR TRAIN LAM
13	1	D920022	ASSEMBLY	ASY LAM HEAD TOP
14	1	D920023	ASSEMBLY	ASY LAM HEAD BOTTOM
15	2	D920119-01	PART	ROLLER- FEED HIGH COF
16	4	D920137	PART	SHAFT- LAM PEEL
17	2	D920147	ASSEMBLY	ASY-CBL-ENC-SNR
18	2	D920153	ASSEMBLY	ASY-CBL-HEADLIFT MOTORS
19	1	D920168	PART	TENSIONER-BELT
20	1	D920175	ASSEMBLY	ASY-CBL-RFID
21	1	D920212	PART	BRACKET-LAM PRINT ATTACH
22	1	D920218	PART	ROLLER-INPUT-FLIPSIDE
23	1	D930411-02	ASSEMBLY	ASY - CENTERPLATE EXIT L2
24	1	D930413	ASSEMBLY	ASY - STEPPER DRIVE LAM
25	1	D930414-02	ASSEMBLY	ASY - FRONT SIDEPLATE L2
26	1	D930415-02	ASSEMBLY	ASY- REAR SIDEPLATE L2
27	1	D930619	ASSEMBLY	ASY-CBL-DS-RFID
28	1	D930621	ASSEMBLY	ASY CBL RBN FLIP LAM
29	1	D940305	ASSEMBLY	ASY - CENTERPLATE INPUT
30	1	E000508	PART	FERRITE-SNAP ON
31	1	F000156	PART	SPACER-NYLON .257 X .500 X .062
32	8	F000178	PART	SCREW-#4-20X.375_TPH_ZP_PLAS
33	8	F000182	PART	SCREW-#4-20X.500_TPH_ZP_PLAS
34	3	F000463	PART	SCREW-4-20X438 TPH ZP PLAS

VER	REV	RECORD	ECO#	DATE	DRA/ENG
	D	D930410 REPLACED BY D940305	CI9506	29-DEC-11	DBC/PGU
	C	REMOVED D920221, ADDED D92022I-10	CI8345	02-NOV-10	DBC/JLS
	B	ADDED (1) F000182 , ADDED (1) 140069	CI8290	21-OCT-10	DBC/JLS

DRAWN BY	DATE
DBC	17-Feb-10
	DIM UNITS
	inch
SCALE	SIZE
0.059	B
ASSY DWG	

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DESCRIPTION: ASY LAM L2 — 1 / 1

PROJECT	ASSY PART NUMBER	ITEM NUMBER
	D930400-02	D930400-02

ENGINEERING USE ONLY

DRAWING FILE	ENGINEERING MODEL NAME	MODEL TYPE
D930400-02	D930400-02	ASSEM

FARGO

RELEASED

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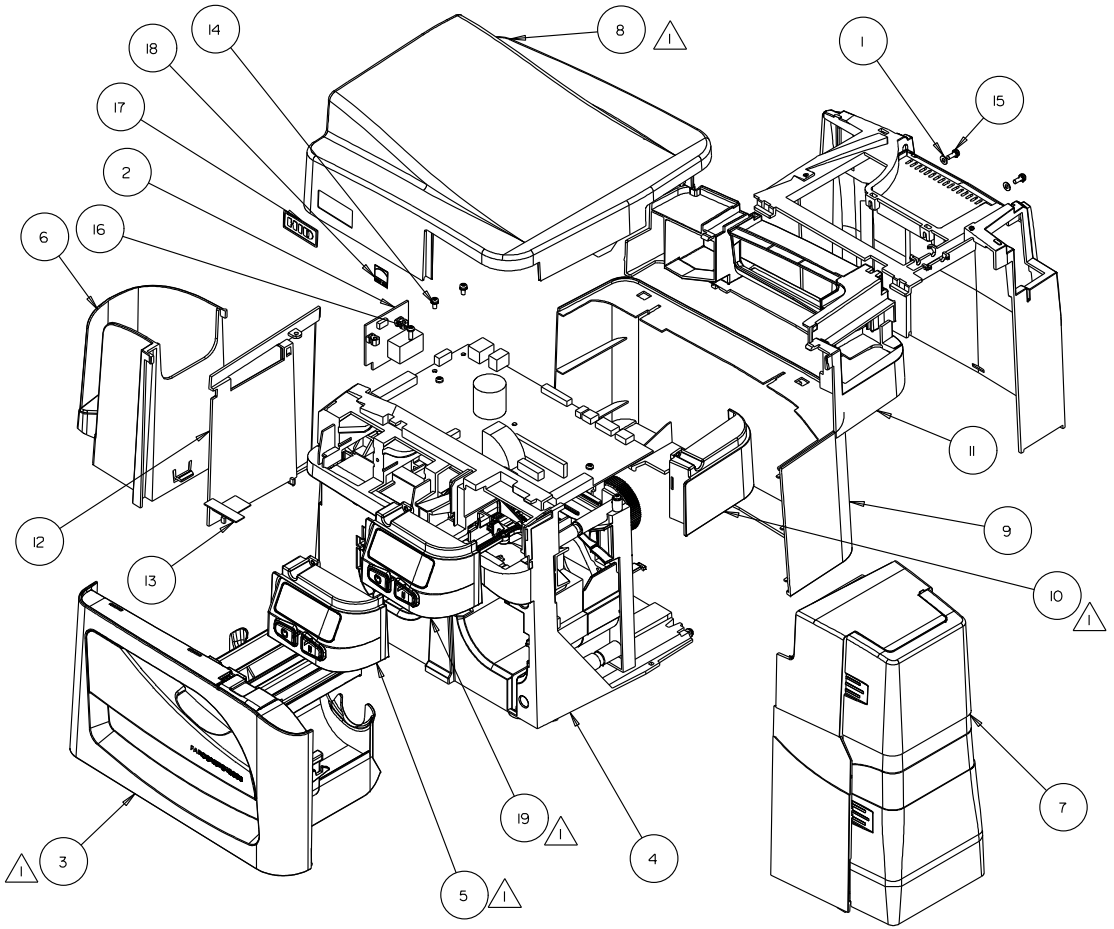
1 PART NUMBER	DESCRIPTION	D930181-XX	D930189-XX	D930018	MDP-00093	ASD-00287	REVISION
D930003	ASY-PRINTER DTC4500	-01	-01	Y	N	D930020	E
MDP-00101	ASY-PRINTER DTC4500E	-01	-01	N	Y	MDP-00102	A



ITEM	QTY	ITEM NUMBER	TYPE	DESCRIPTION
1	2	140040	PART	WASHER 3MM FLAT
2	1	A930510	PART	ASY PCB ETHERNET CONTROLLER
3	1	ASD-00287	REFERENCE	ASY-CARTRIDGE-LARGE RIBBON-DTC45XX
4	1	D930002 -01	ASSEMBLY	ASY-COMMON PRINT ENGINE 4500
5	1	D930018	ASSEMBLY	ASY-COVER-LCD/BUTTON DISPLAY
6	1	D930033	ASSEMBLY	ASY OUTPUT BIN
7	1	D930039	ASSEMBLY	ASY-DUAL INPUT
8	1	D930181 -XX	PART	COVER-TOP
9	1	D930182-01	PART	COVER-BACK
10	1	D930189-XX	PART	COVER-DISPLAY
11	1	D930280-01	PART	COVER-BACK-TOP
12	1	D930281-01	PART	COVER-OUTPUT
13	1	D930370	ASSEMBLY	ASY TAB CARD PATH INSERT
14	2	F000170	PART	SCREW-M3X6_TPH_ZP_SEM
15	2	F000171	PART	SCREW-M3X8_TPH_ZP_SEM
16	2	F000178	PART	SCREW-#4-20X.375_TPH_ZP_PLAS
17	1	L001393	PART	BADGE - HID
18	1	L001535	PART	LABEL-ENERGY STAR
19	1	MDP-00093	ASSEMBLY	ASY COVER LCD/BUTTON DISPLAY

CABLE ASSEMBLIES NOT SHOWN FOR CLARITY

NOTES:

1. TABLE TO IDENTIFY PART NUMBER DIFFERENCES BETWEEN THE ASSEMBLIES.

	A	INITIAL RELEASE	EMN-00990	29-Aug-13	TGG/TGG
VER	REV	RECORD	ECO#	DATE	DRA/ENG

DRAWN BY: TGG | DATE: 29-Aug-13 | DIM UNITS: inch | SCALE: 0.275 | SIZE: B

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DESCRIPTION: ASY PRINTER DTC45XX | 1 / 1

ASSY DWG | PROJECT: ONYX | ASSY PART NUMBER: ASD-00286 | ITEM NUMBER: ASD-00286

ENGINEERING USE ONLY

DRAWING FILE	ENGINEERING MODEL NAME	MODEL TYPE
ASD-00286	ASD-00286	ASSEM

FARGO

RELEASED

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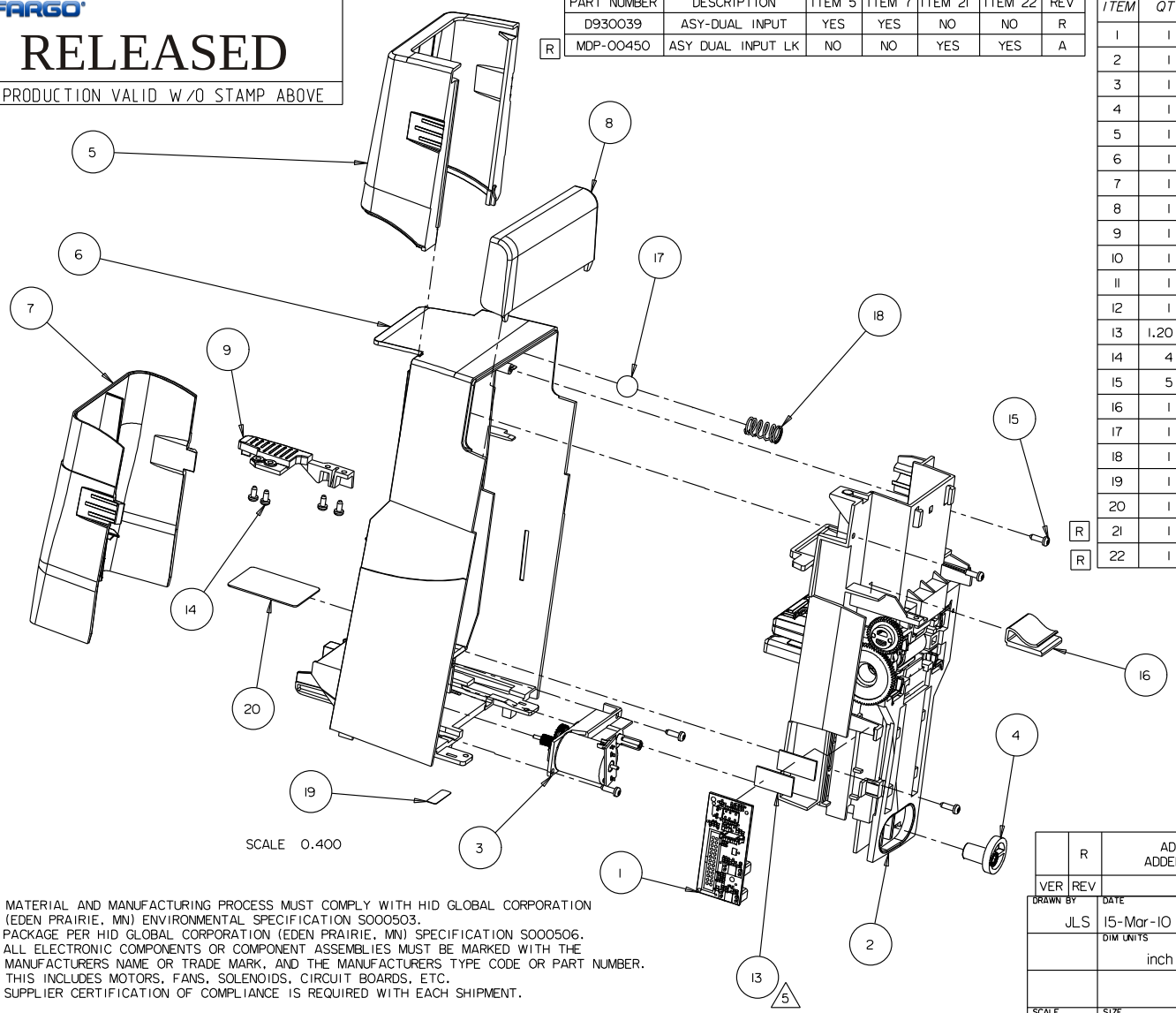
	PART NUMBER	DESCRIPTION	ITEM 5	ITEM 7	ITEM 21	ITEM 22	REV
	D930039	ASY-DUAL INPUT	YES	YES	NO	NO	R
R	MDP-00450	ASY DUAL INPUT LK	NO	NO	YES	YES	A



SCALE 0.400

ITEM	QTY	ITEM NUMBER	TYPE	DESCRIPTION
1	1	A930504	ASSEMBLY	ASY PCB INPUT CONTROLLER
2	1	D930035	ASSEMBLY	ASY-FRAME-DUAL INPUT
3	1	D930038	ASSEMBLY	ASY-INPUT GEARS
4	1	D930174	PART	CAM- INPUT
5	1	D930199-01	PART	COVER-INPUT DUAL
6	1	D930202-01	PART	HOUSING-INPUT DUAL
7	1	D930273-01	PART	DOOR-INPUT DUAL LOWER
8	1	D930283-01	PART	COVER-INPUT CAP
9	1	D930304	PART	HANDLE DUAL HOPPER
10	1	D930312	PART	FOAM-CARD BLOCK
11	1	D930622	ASSEMBLY	ASY CBL MTR DUAL INPUT
12	1	D930623	ASSEMBLY	ASY CBL RBN INPUT
13	1.20 in	F000117	PART	TAPE 1" 2 SIDED FOAM ADHESIV
14	4	F000176	PART	SCREW-#4-20X.250_TPH_ZP_PLAS
15	5	F000178	PART	SCREW-#4-20X.375_TPH_ZP_PLAS
16	1	F000386	PART	CLAMP-CABLE, RIBBON .88 X .25
17	1	F000503	PART	BALL-STEEL
18	1	F000504	PART	SPRING-COMP .420 X .875 X .035
19	1	L000837	PART	LBL, Made in China .85" x .25"
20	1	L001573	PART	LABEL LOWER PLATFORM
R 21	1	MDP-00549	ASSEMBLY	ASY COVER LOCK TOP
R 22	1	MDP-00550	ASSEMBLY	ASY COVER LOCK BOTTOM

1) CABLES NOT SHOWN FOR CLARITY
2) D930312 FOAM CARD BLOCK IS USED FOR SHIPPING ONLY AND IS NOT SHOWN

1. MATERIAL AND MANUFACTURING PROCESS MUST COMPLY WITH HID GLOBAL CORPORATION (EDEN PRAIRIE, MN) ENVIRONMENTAL SPECIFICATION SOOO503.
2. PACKAGE PER HID GLOBAL CORPORATION (EDEN PRAIRIE, MN) SPECIFICATION SOOO506.
3. ALL ELECTRONIC COMPONENTS OR COMPONENT ASSEMBLIES MUST BE MARKED WITH THE MANUFACTURERS NAME OR TRADE MARK, AND THE MANUFACTURERS TYPE CODE OR PART NUMBER. THIS INCLUDES MOTORS, FANS, SOLENOIDS, CIRCUIT BOARDS, ETC.
4. SUPPLIER CERTIFICATION OF COMPLIANCE IS REQUIRED WITH EACH SHIPMENT.

5. CUT TAPE INTO (2) .600±.020 PIECES AND INSTALL ONTO THE BACK OF A930504

VER	REV	RECORD	ECO#	DATE	DRA/ENG
	R	ADDED TABLE, ADDED MDP-00450 ADDED MDP-00549, ADDED MDP-00550	EMN-00996	09-SEP-13	DBC/PGU

DRAWN BY	JLS
DATE	15-Mar-10
DIM UNITS	inch
SCALE	0.250
SIZE	B

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DESCRIPTION: ASY-DUAL INPUT 1/1

ASSY DWG

PROJECT	ASSY PART NUMBER	ITEM NUMBER
X001800	ASD-00227	ASD-00227

ENGINEERING USE ONLY

DRAWING FILE	ENGINEERING MODEL NAME	MODEL TYPE
ASD-00227	ASD-00227	ASSEM

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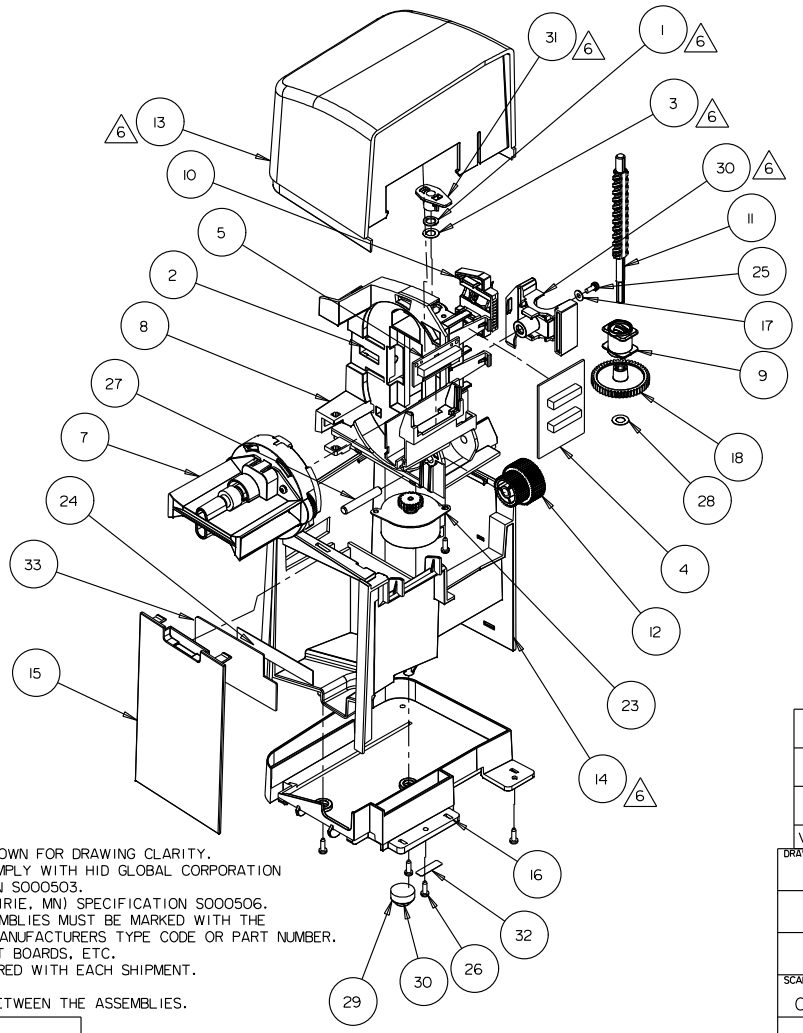
NOT PRODUCTION VALID W/O STAMP ABOVE

6 PART NUMBER	COLOR	D930192-XX	D930193-XX	FBD-00625	FBD-00647	130951	820621	REV
D930010-01	BLACK	D930192-01	D930193-01	D930150	D930234	N	N	Y
D930010-02	SILVER	D930192-02	D930193-02	D930150	D930234	N	N	Y
D930010-04	(M) GRAY	D930192-03	D930193-03	D930150-01	D930234-01	Y	Y	A
D930010-05	RED	D930192-05	D930193-05	D930150	D930234	N	N	F
D930010-06	BLACK	D930192-01	D930193-01	D930150-01	D930234-01	Y	Y	A



ITEM	QTY	ITEM NUMBER	TYPE	DESCRIPTION
1	1	130951	PART	WASHER-SPRING.269ID.423OD.006THK
2	2	150175	PART	SPRING-COMP .240 X .562 X .016
3	1	820621	PART	WASHER-ENCODER WHEEL SUPPORT
4	1	A930503	PART	ASY-PCB OUTPUT CONTROLLER
5	1	A930512	PART	ASY-PCB FLIPPER INTERFACE
6	1	D900113	ASSEMBLY	ASY-CBL HDLFT SNR
7	1	D930011	ASSEMBLY	ASY-FLIPPER TABLE
8	1	D930145	PART	FRAME FLIPPER SHORT
9	1	D930152	PART	NUT LEAD SCREW
10	1	D930153	PART	BRACKET GEAR RACK FLIP
11	1	D930155	PART	SCREW LEAD FLIP SHRT SPLT
12	1	D930163	PART	GEAR COMBO FLIP 42T X 56T
13	1	D930192 -XX	PART	COVER FLIPPER TOP
14	1	D930193 -XX	PART	COVER-FLIPPER CARD BIN
15	1	D930194-01	PART	COVER FLIPPER DOOR
16	1	D930254-01	PART	COVER-FLIPPER-BASE
17	1	D930272	PART	WASHER 3.2mm X 8mm X.5mm
18	1	D930375	PART	GEAR 0.8 MODULE 50 TOOTH
19	1	D930609	ASSEMBLY	ASY-IR-SENSOR-PAIR
20	1	D930610	ASSEMBLY	ASY-CBL-STEPPER MOTOR
21	1	D930611	ASSEMBLY	ASY-CBL-RIBBON-FLIPPER
22	1	E000508	PART	FERRITE-SNAP ON
23	1	E001192	ASSEMBLY	MOTOR STEPPER 7.5 DEG NMB
24	3 IN	F000145	PART	TAPE.VHB CLEAR X .5 .020" THK
25	1	F000171	PART	SCREW-M3X8_TPH_ZP_SEM
26	6	F000178	PART	SCREW-#4-20X.375_TPH_ZP_PLAS
27	1	F000494	PART	DOWEL PIN 6MM X 36
28	1	F000536	PART	WASHER .465 X.250 X .015 NYLON
29	1	F000554	PART	FOOT-RUBBER .67 DIA X .4
30	1	FBD-00625	REFERENCE	BRACKET TABLE MOUNT
31	1	FBD-00647	REFERENCE	BUSHING SCREW TWIST-LOCK
32	1	L000837	PART	LBL. Made in China .85" x .25"
33	1	MDP-00121	PART	FLIPPER - SHIELD

NOTES:

1. CABLES AND ELECTRICAL COMPONENTS ARE NOT SHOWN FOR DRAWING CLARITY.
2. MATERIAL AND MANUFACTURING PROCESS MUST COMPLY WITH HID GLOBAL CORPORATION (EDEN PRAIRIE, MN) ENVIRONMENTAL SPECIFICATION S000503.
3. PACKAGE PER HID GLOBAL CORPORATION (EDEN PRAIRIE, MN) SPECIFICATION S000506.
4. ALL ELECTRONIC COMPONENTS OR COMPONENT ASSEMBLIES MUST BE MARKED WITH THE MANUFACTURERS NAME OR TRADE MARK, AND THE MANUFACTURERS TYPE CODE OR PART NUMBER. THIS INCLUDES MOTORS, FANS, SOLENOIDS, CIRCUIT BOARDS, ETC.
5. SUPPLIER CERTIFICATION OF COMPLIANCE IS REQUIRED WITH EACH SHIPMENT.

6. TABLE TO IDENTIFY PART NUMBER DIFFERENCES BETWEEN THE ASSEMBLIES.

VER	REV	RECORD	ECO#	DATE	DRA/ENG
	Z	RELEASING THE D930010-04 AND D910010-06.	EMN-00971	23-AUG-13	DBC/TGG
	Y	REMOVED 3" OF F000145. REPLACED D930351 WITH MDP-00121. UPDATED TABLE TABS	EMN-00215	1-FEB-13	TGG/TGG
	X	ADDED (2) F000178 SCREWS TO ASSEMBLY	EMN-00045	12-OCT-12	CAR/TB

ENGINEERING USE ONLY		
DRAWING FILE	ENGINEERING MODEL NAME	MODEL TYPE
D930010	D930010	ASSEM

DRAWN BY: CJ
DATE: 08-Feb-10
DIM UNITS: inch
SCALE: 0.300
SIZE: B

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DESCRIPTION: ASY FLIPPER SHORT 1/1

ASSY DWG

PROJECT:

ASSY PART NUMBER: D930010

ITEM NUMBER: D930010

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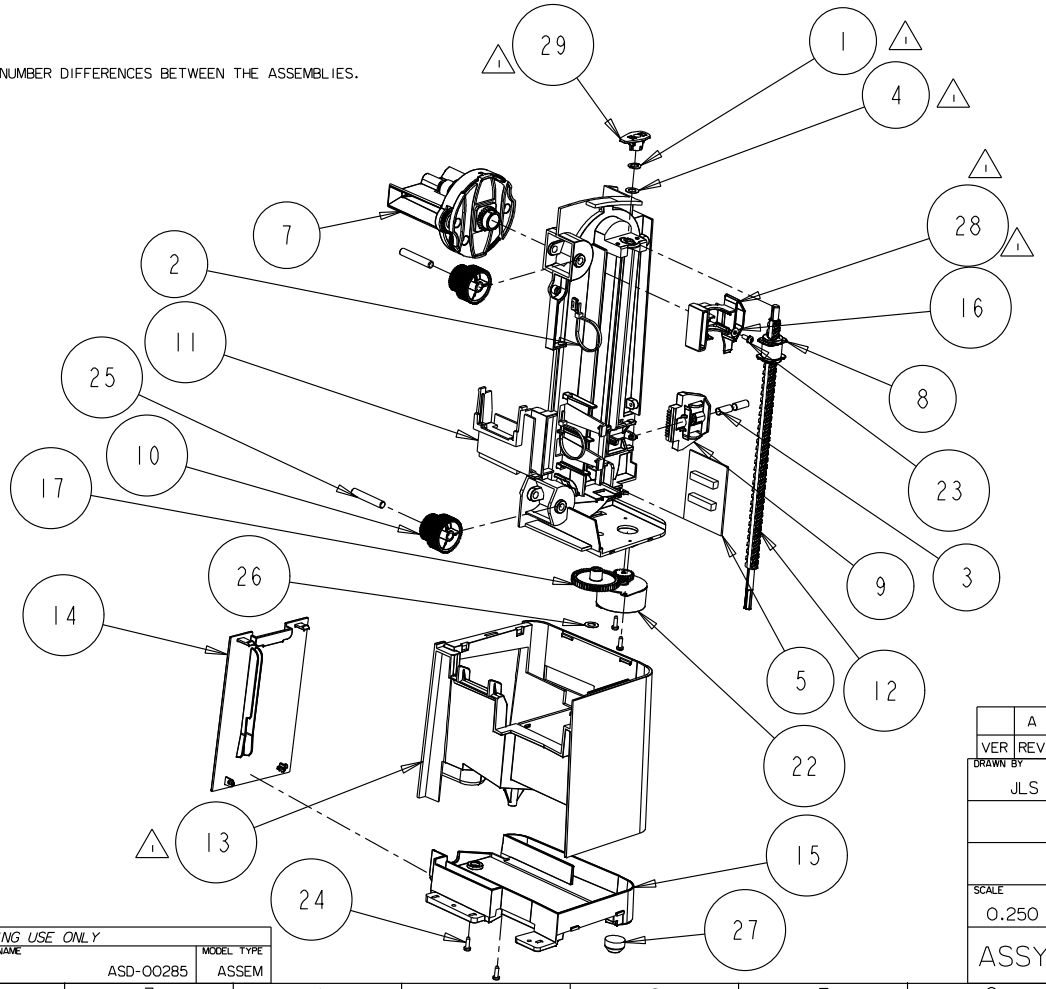
⚠1 PART NUMBER	DESCRIPTION	D930193-XX	FBD-00625	FBD-00647	130951	820621	REVISION
D930019-01	ASY FLIPPER TALL	-01	D930150	D930234	N	N	G
MDP-00104	ASY FLIPPER TALL DTC4500E	-01	D930150-01	D930234-01	Y	Y	A

NOTES:

⚠1. TABLE TO IDENTIFY PART NUMBER DIFFERENCES BETWEEN THE ASSEMBLIES.



ITEM	QTY	ITEM NUMBER	TYPE	DESCRIPTION
1	1	130951	PART	WASHER-SPRING.269ID.423OD.006THK
2	2	140069	PART	TIE WRAP 4.00"L X 0.10"W
3	2	150175	PART	SPRING-COMP .240 X .562 X .016
4	1	820621	PART	WASHER-ENCODER WHEEL SUPPORT
5	1	A930503	PART	ASY-PCB OUTPUT CONTROLLER
6	1	D900113	ASSEMBLY	ASY-CBL HDLFT SNR
7	1	D930011	ASSEMBLY	ASY-FLIPPER TABLE
8	1	D930152	PART	NUT LEAD SCREW
9	1	D930153	PART	BRACKET GEAR RACK FLIP
10	2	D930163	PART	GEAR COMBO FLIP 42T X 56T
11	1	D930175	PART	FRAME FLIPPER TALL
12	1	D930176	PART	SCREW LEAD FLIP LONG SPLT
13	1	D930193 -XX	PART	COVER-FLIPPER CARD BIN
14	1	D930194-01	PART	COVER FLIPPER DOOR
15	1	D930254-01	PART	COVER-FLIPPER-BASE
16	1	D930272	PART	WASHER 3.2mm X 8mm X.5mm
17	1	D930375	PART	GEAR 0.8 MODULE 50 TOOTH
18	1	D930610	ASSEMBLY	ASY-CBL-STEPPER MOTOR
19	1	D930614	ASSEMBLY	ASY-IR-SENSOR-PAIR FT
20	1	D930626	ASSEMBLY	ASY CBL FLIPPER
21	1	E000508	PART	FERRITE-SNAP ON
22	1	E001192	ASSEMBLY	MOTOR STEPPER 7.5 DEG NMB
23	1	F000171	PART	SCREW-M3X8_TPH_ZP_SEM
24	4	F000178	PART	SCREW-#4-20X.375_TPH_ZP_PLAS
25	2	F000494	PART	DOWEL PIN 6MM X 36
26	1	F000536	PART	WASHER .465 X.250 X .015 NYLON
27	1	F000554	PART	FOOT-RUBBER .67 DIA X .4
28	1	FBD-00625	REFERENCE	BRACKET TABLE MOUNT
29	1	FBD-00647	REFERENCE	BUSHING SCREW TWIST-LOCK

CABLE ASSEMBLIES NOT SHOWN FOR CLARITY

	A	INITIAL RELEASE OF ASD-00285 DWG.	EMN-00990	26-AUG-13	TGG/TGG
VER	REV	RECORD	ECO#	DATE	DRA/ENG

DRAWN BY: JLS	DATE: 16-Sep-10		
	DIM UNITS: inch		
SCALE: 0.250	SIZE: B	DESCRIPTION: ASY FLIPPER TALL	1/1
ASSY DWG	PROJECT: NEO	ASSY PART NUMBER: ASD-00285	ITEM NUMBER: ASD-00285

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DRAWING FILE	ENGINEERING MODEL NAME	MODEL TYPE
ASD-00285	ASD-00285	ASSEM

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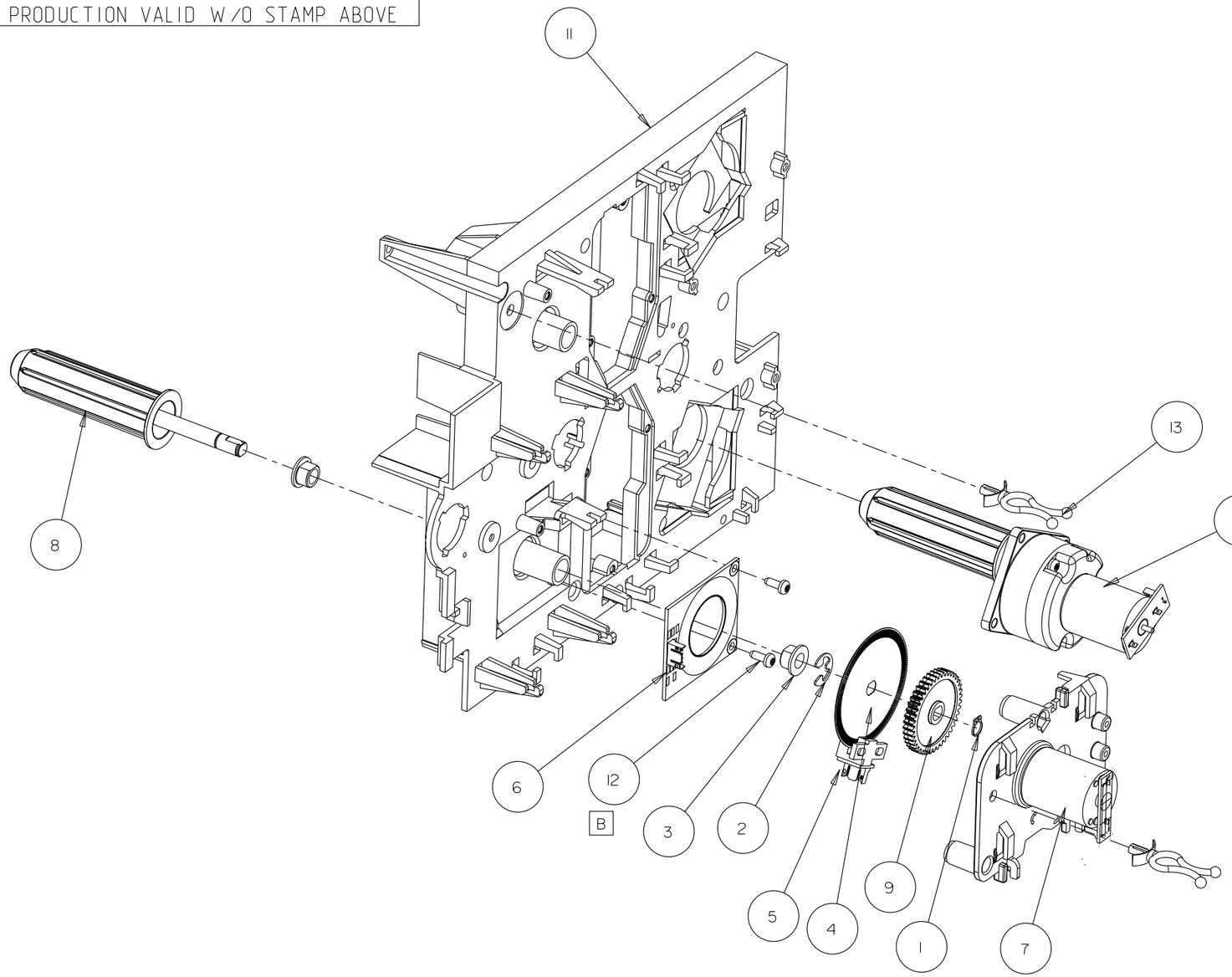

ITEM	QTY	ITEM NUMBER	TYPE	DESCRIPTION
1	1	140048	PART	RETAINING RING-EXT C .25 IN SHFT
2	1	140062	PART	RETAINING RING-EXT E .250 IN SHFT
3	2	760343	PART	BEARING - DRIVE ROLLER
4	1	810492	PART	ENCODER WHEEL
5	1	A000126	ASSEMBLY	ASY-PCB S3 SENSOR-2
6	1	A000365-01	ASSEMBLY	ASY PCB RFID ANTENNA
7	1	D900406	ASSEMBLY	ASY REWIND MTR
8	1	D920031	ASSEMBLY	ASY- SUPPLY SHAFT
9	1	D920170	PART	GEAR 42T SPUR
10	1	D920189	ASSEMBLY	ASY MTR LAM TAKEUP
11	1	D920210	ASSEMBLY	SIDEPLATE - REAR
12	2	F000177	PART	SCREW-#4-20X.313_TPH_ZP_PLAS
13	2	F000351	PART	CABLE TIE TWIST LOCK

VER	REV	RECORD	ECO#	DATE	DRA/ENG
	B	REMOVED 2 F000176, ADDED 2 F000177	C18290	08-OCT-10	DBC/JLS
	A	RELEASE TO PRODUCTION, REMOVED D920163 AND F000182	C17860	21-APR-10	JLS/JLS
	01	INITIAL RELEASE	N/A	19-Jan-10	ENG/DRA

DRAWN BY	JLS
DATE	19-Jan-10
DIM UNITS	inch
SCALE	0.500
SIZE	B

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DESCRIPTION: ASY- REAR SIDEPLATE LI

1 / 1

ASSY DWG

PROJECT

ASSY PART NUMBER: D930415-01

ITEM NUMBER: D930415-01

ENGINEERING USE ONLY

DRAWING FILE	ENGINEERING MODEL NAME	MODEL TYPE
D930415-01	D930415-01	ASSEM

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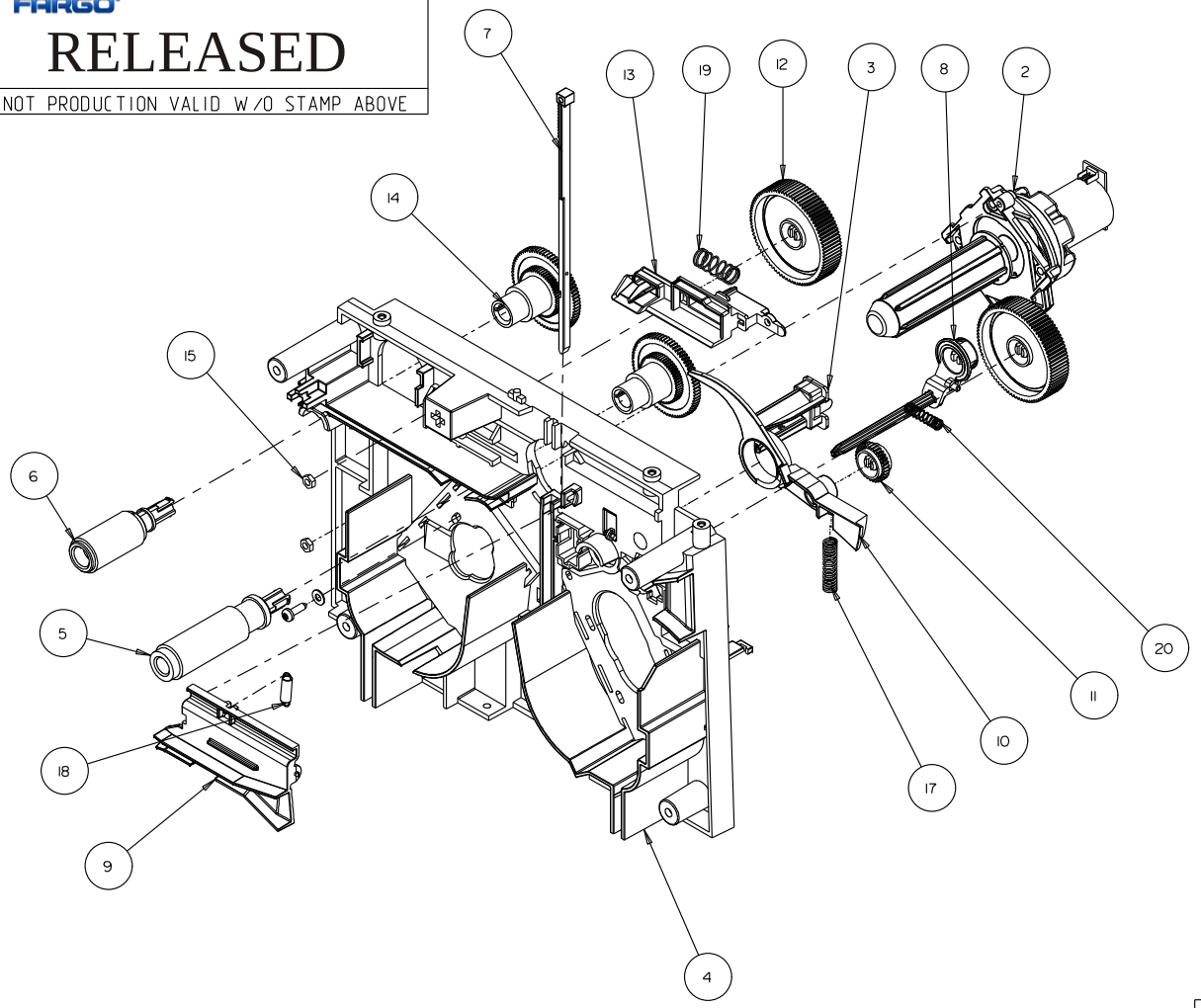

ITEM	QTY	ITEM NUMBER	TYPE	DESCRIPTION
1	1	140040	PART	WASHER 3MM FLAT
2	1	D930014	ASSEMBLY	ASY-MOTOR-TAKEUP
3	1	D930016	ASSEMBLY	ASY-RIBBON SENSOR
4	1	D930101	PART	SIDEPLATE-REAR
5	1	D930122	ASSEMBLY	ROLLER, MAG
6	1	D930123	ASSEMBLY	ROLLER, OUTPUT
7	1	D930127	PART	PUSH ROD
8	1	D930128	PART	LEVER-CLEANING ROLLER
9	1	D930131	PART	PUSHER CARD
10	1	D930132	PART	LEVER-INPUT
11	1	D930164	PART	GEAR-INPUT_LEVER
12	2	D930209	PART	GEAR-IDLER
13	1	D930242	PART	BRACKET-SC/MAG-CAM-LINKAGE
14	2	D930361	PART	GEAR-DRIVE
15	2	F000140	PART	NUT M3 X 0.5
16	1	F000178	PART	SCREW-#4-20X.375_TPH_ZP_PLAS
17	1	F000483	PART	SPRING-COMP-1.00L x .2400D x .029WD
18	1	F000489	PART	SPRING EXT .177 X .610 X .018
19	1	F000508	PART	SPRING-COMP-.312 X .813 X .026
20	1	F000509	PART	SPRING-COMP-.180 X .750 x .020

	VER	REV	RECORD	ECO#	DATE	DRA/ENG
		D	REMOVED D930015, IX 140040 AND IX F000178	CI8508	24-Jan-11	CJ/TL
		C	ADDED D930361	CI8453	16-Dec-10	CJ/TL
		B	D930361 WAS D930124	CI8269	12-Oct-10	CJ/TL
		A	INITIAL RELEASE	CI8109	10-Aug-10	CJ/CJ

ENGINEERING USE ONLY

DRAWING FILE	ENGINEERING MODEL NAME	MODEL TYPE
D930068	D930002_SUB2	ASSEM

NOTES:
1. NO CABLES ARE DISPLAYED FOR DRAWING CLARITY.

DRAWN BY	CJ
DATE	30-Jul-10
DIM UNITS	inch
SCALE	0.100
SIZE	B

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DESCRIPTION: ASY-REAR SIDEPLATE 1/1

ASSY DWG

PROJECT	ASSY PART NUMBER	ITEM NUMBER
	D930068	D930068

FARGO

RELEASED

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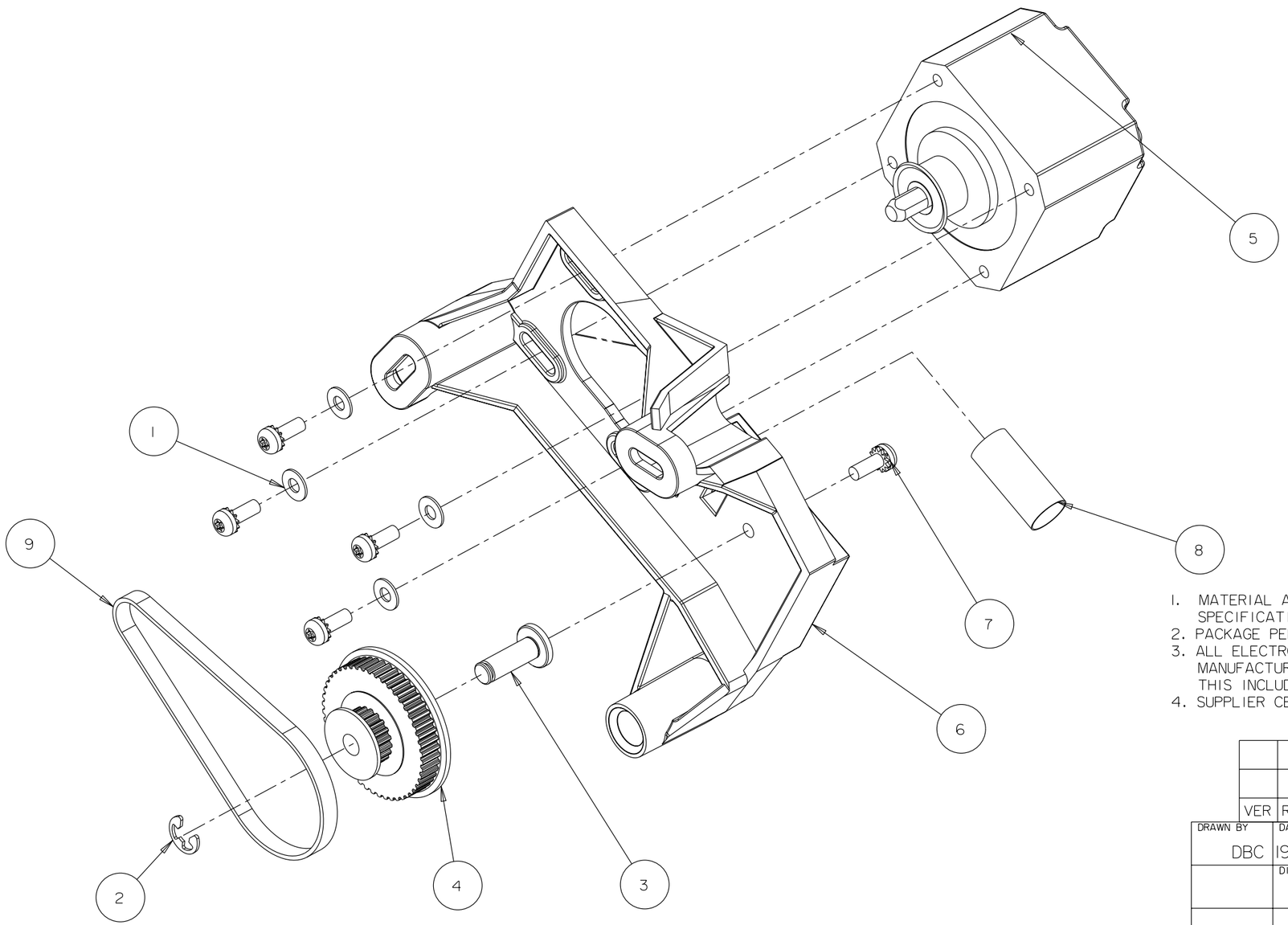
ITEM	QTY	ITEM NUMBER	TYPE	DESCRIPTION
1	4	140040	PART	WASHER 3MM FLAT
2	1	140063	PART	RETAINING RING-EXT E .188 IN SHFT
3	1	D850410	PART	POST-IDLER
4	1	D900430	PART	PULLEY MXL 48X20 GROOVE
5	1	D930027	ASSEMBLY	ASY STEPPER PULLEY
6	1	d930134-01	PART	BRACKET-MTR STEPPER
7	5	F000171	PART	SCREW-M3X8_TPH_ZP_SEM
8	1	F000332	PART	SPRING - COMP .360 X .800 X .040
9	1	F000424	PART	BELT, 81 GRV, .080P, .157" W



1. MATERIAL AND MANUFACTURING PROCESS MUST COMPLY WITH FARGO ENVIRONMENTAL SPECIFICATION S000503.
2. PACKAGE PER FARGO SPECIFICATION S000506.
3. ALL ELECTRONIC COMPONENTS OR COMPONENT ASSEMBLIES MUST BE MARKED WITH THE MANUFACTURERS NAME OR TRADE MARK, AND THE MANUFACTURERS TYPE CODE OR PART NUMBER. THIS INCLUDES MOTORS, FANS, SOLENOIDS, CIRCUIT BOARDS, ETC.
4. SUPPLIER CERTIFICATION OF COMPLIANCE IS REQUIRED WITH EACH SHIPMENT.

VER	REV	RECORD	ECO#	DATE	DRA/ENG
	B	REV CHANGE FOR D930027	CI7681	04-MAR-10	DBC/JS
	A	PRODUCTION RELEASE	CI7011	20-AUG-09	DBC/JS

DRAWN BY: DBC	DATE: 19-Aug-09	FARGO® Part of HID Global	**CONFIDENTIAL AND PROPRIETARY INFORMATION** This document contains confidential and proprietary information, which may not be duplicated, published, disseminated or disclosed to unintended third party recipients (or just: "third parties") or used for any purpose, without written permission from Fargo Electronics Inc.
	DIM UNITS: inch		
SCALE: 0.333	SIZE: B	DESCRIPTION: ASY STEPPER DRIVE	1 / 1
ASSY DWG		PROJECT	ASSY PART NUMBER: D930028 / ITEM NUMBER: D930028

ENGINEERING USE ONLY

DRAWING FILE	ENGINEERING MODEL NAME	MODEL TYPE
D930028	D930028	ASSEM

FARGO

RELEASED

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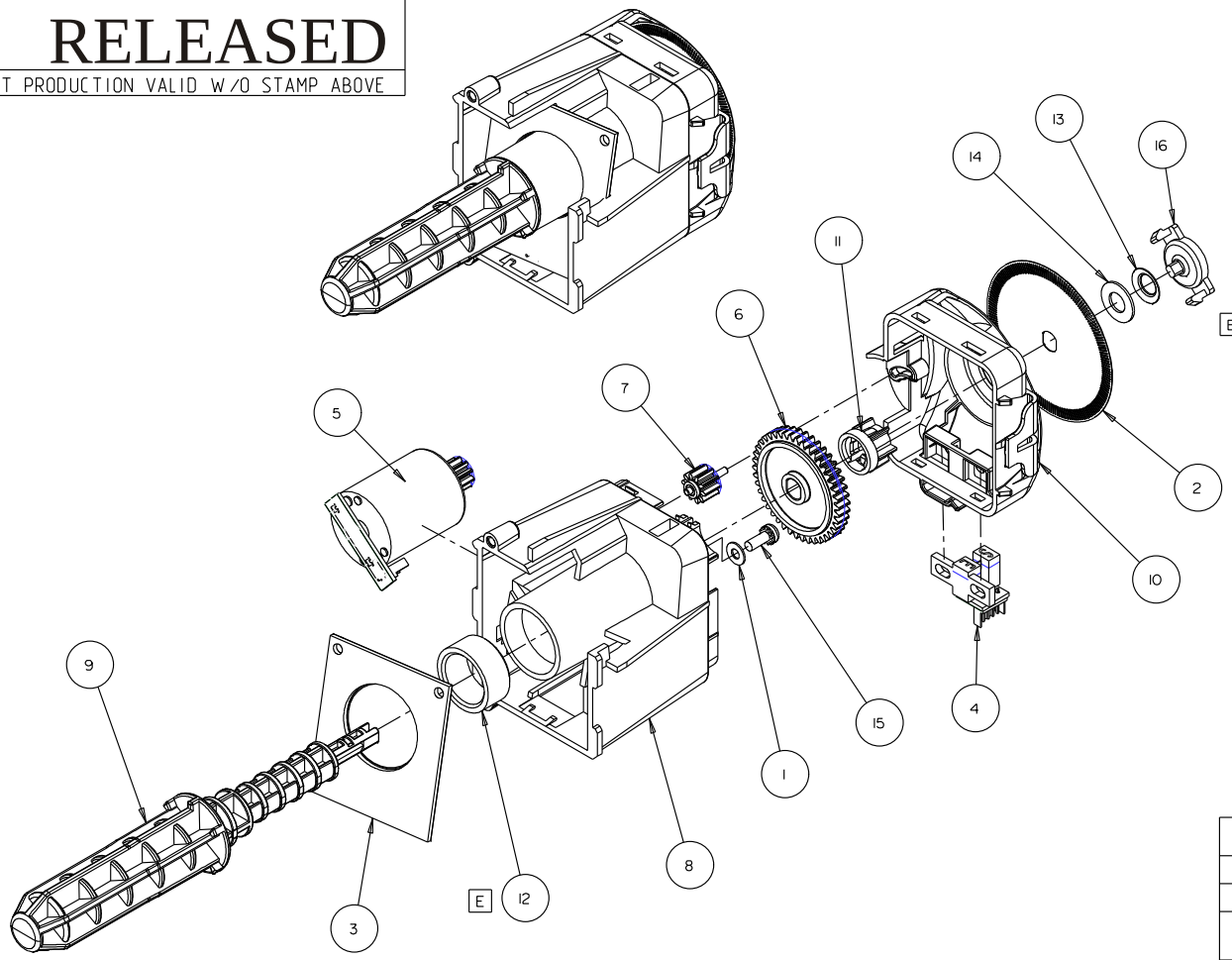

ITEM	QTY	ITEM NUMBER	TYPE	DESCRIPTION
1	1	140040	PART	WASHER 3MM FLAT
2	1	810492	PART	ENCODER WHEEL
3	1	A000365-01	ASSEMBLY	ASY PCB RFID ANTENNA
4	1	A930514	ASSEMBLY	ASY-PCB SENSOR WITH CONNECTOR
5	1	D920112	ASSEMBLY	ASY MTR IOT PINION
6	1	D920170	PART	GEAR 42T SPUR
7	1	D930026	ASSEMBLY	ASY GEAR/PIN SUPPLY
8	1	D930114	PART	MOUNT-SPINDEL-SUPPLY
9	1	D930115	PART	SPINDLE-RIBBON-SUPPLY
10	1	D930116	PART	COVER-SUPPLY SPINDEL
11	1	D930119	PART	SPACER-SUPPLY SPINDEL
E 12	1	D930372	PART	BEARING-SUPPLY SPINDLE
13	1	F000050	PART	RETAINER-GRVLS.250X.437X.010SS
14	1	F000097	PART	WASHER-RUBBER- .250 ID .500 OD .030 THK
15	1	F000171	PART	SCREW-M3X8_TPH_ZP_SEM
16	1	F000511	PART	DAMPER-FRONT SNAP .15 N/cm

VER	REV	RECORD	ECO#	DATE	DRA/ENG
	E	ADDED D930372, QTY:1 (C4), REPLACED "FARGO" WITH "HID GLOBAL..." IN ALL NOTES (A1).	EMN-00640	20-Jun-13	ALL/ALL
	D	ADDED F000097 AND F000050	CI7926	03-AUG-10	DBC/ALL
	C	A930514 WAS A000126	CI8031	09-JUL-10	CAR/LH
	B	REPLACED F000487 WITH F000511, ADDED 140040 WASHER	CI7697	16-MAR-10	DBC/CJ

NOTES:

E 1. MATERIAL AND MANUFACTURING PROCESS MUST COMPLY WITH HID GLOBAL CORPORATION (EDEN PRAIRIE, MN) ENVIRONMENTAL SPECIFICATION S000503.

E 2. PACKAGE PER HID GLOBAL CORPORATION (EDEN PRAIRIE, MN) SPECIFICATION S000506.

3. ALL ELECTRONIC COMPONENTS OR COMPONENT ASSEMBLIES MUST BE MARKED WITH THE MANUFACTURERS NAME OR TRADE MARK, AND THE MANUFACTURERS TYPE CODE OR PART NUMBER. THIS INCLUDES MOTORS, FANS, SOLENOIDS, CIRCUIT BOARDS, ETC.

4. SUPPLIER CERTIFICATION OF COMPLIANCE IS REQUIRED WITH EACH SHIPMENT.

ENGINEERING USE ONLY		
DRAWING FILE	ENGINEERING MODEL NAME	MODEL TYPE
D930015	D930015	ASSEM

DRAWN BY	DATE
CJ	15-Feb-10
	DIM UNITS: inch
SCALE: 0.750	SIZE: B
ASSY DWG	

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DESCRIPTION: ASY-SUPPLY-RFID SPINDLE 1/1

PROJECT	ASSY PART NUMBER	ITEM NUMBER
	D930015	D930015